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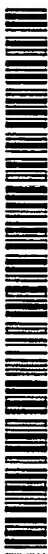
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(54) Title: METHODS OF DIAGNOSIS OF CANCER COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

(57) Abstract: Described herein are genes whose expression are up-regulated or down-regulated in specific cancers. Related methods and compositions that can be used for diagnosis and treatment of those cancers are disclosed. Also described herein are methods that can be used to identify modulators of selected cancers.

## METHODS OF DIAGNOSIS OF CANCER, COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

### 5 CROSS-REFERENCES TO RELATED APPLICATIONS

This application claims priority to USSN 60/323,469, filed September 17, 2001; USSN 60/355,145, filed February 8, 2002; USSN 60/369,899, filed April 4, 2002; USSN 60/323,887, filed September 20, 2001; USSN 60/355,257, filed February 8, 2002; USSN 60/325,114, filed September 25, 2001; USSN 60/340,944, filed October 29, 2001; USSN 60/350,666, filed  
10 November 13, 2001; and USSN 60/372,246, filed April 12, 2002; each of which is incorporated herein by reference for all purposes.

### FIELD OF THE INVENTION

The invention relates to the identification of nucleic acid and protein expression profiles and nucleic acids, products, and antibodies thereto that are involved in cancer; and to the use of  
15 such expression profiles and compositions in the diagnosis, prognosis, and therapy of cancer. The invention further relates to methods for identifying and using agents and/or targets that modulate cancer.

### BACKGROUND OF THE INVENTION

Cancer is a major cause of morbidity in the United States. For example, in 1996, the  
20 American Cancer Society estimated that 1,359,150 people were diagnosed with a malignant neoplasm and 554,740 died from one of these diseases. Cancer is responsible for 23.9 percent of all American deaths and is exceeded only by heart disease as a cause of mortality (33 percent). Unfortunately, cancer mortality is increasing and sometime early in this century, cancer is expected to become the leading cause of mortality in the United States as it already is  
25 in Japan.

Cancers share the characteristic of disordered control over normal cell division, growth, and differentiation. Their initial clinical manifestations are extremely heterogeneous, with over 70 types of cancer arising in virtually every organ and tissue of the body. Moreover, some of those similarly classified cancer types may represent multiple different molecular diseases.  
30 Unfortunately, some cancers may be virtually asymptomatic until late in the disease course, when treatment is more difficult, and prognosis grim.



Treatment for cancer typically includes surgery, chemotherapy, and/or radiation therapy. Although nearly 50 percent of cancer patients can be effectively treated using these methods, the current therapies all induce serious side effects which diminish quality of life. The identification of novel therapeutic targets and diagnostic markers will be important for  
5 improving the diagnosis and treatment of cancer patients.

Recent advances in molecular medicine have increased the interest in tumor-specific antigens that could serve as targets for various immunotherapeutic or small molecule strategies. Antigens suitable for immunotherapeutic strategies should be highly expressed in cancer tissues, preferably accessible from the vasculature and at the cell surface, and ideally not expressed in  
10 normal adult tissues. Expression in tissues that are dispensable for life, however, may be tolerated, e.g., reproductive organs. Examples of antigens that are currently available for the detection and treatment of certain cancers include Her2/neu and the B-cell antigen CD20. Humanized monoclonal antibodies directed to Her2/neu (Herceptin®/trastuzumab) are currently in use for the treatment of metastatic breast cancer. See Ross and Fletcher (1998) Stem Cells  
15 16:413-428. Similarly, anti-CD20 monoclonal antibodies (Rituxin®/rituximab) are used to effectively treat non-Hodgkin's lymphoma. See Maloney, et al. (1997) Blood 90:2188-2195; Leget and Czuczman (1998) Curr. Opin. Oncol. 10:548-551.

The elucidation of a role for novel proteins and compounds in disease states for identification of therapeutic targets and diagnostic markers is valuable for improving the current  
20 treatment of cancer patients. Accordingly, provided herein are molecular targets for therapeutic intervention in various defined cancers. Additionally, provided herein are methods that can be used in diagnosis and prognosis of cancer. Further provided are methods that can be used to screen candidate bioactive agents for the ability to modulate cancer.

#### SUMMARY OF THE INVENTION

25 The present invention provides methods for determining the presence or absence of a pathological cell in a patient, the method comprising detecting a nucleic acid comprising a sequence at least 80% identical to a sequence as described in Tables 2A-68 in a biological sample from the patient, thereby determining the presence or absence of the pathological cell. In certain embodiments of the method, the pathology is described in Table 1, including a  
30 cancer; the biological sample comprises isolated nucleic acids; the nucleic acids are mRNA; the biological sample is tissue from an organ which is affected by the pathology of Table 1, including a cancer; a further step is used of amplifying nucleic acids before the step of detecting

the nucleic acid; the detecting is of a protein encoded by the nucleic acid; the nucleic acid comprises a sequence as described in Tables 2A-68; the detecting step is carried out by using a labeled nucleic acid probe, utilizing a biochip comprising at sequence at least 80% identical to a sequence as described in Tables 2A-68, or detecting a polypeptide encoded by the nucleic acid;  
5 or the patient is undergoing a therapeutic regimen to treat the pathology of Table 1, or is suspected of having the pathology or cancer.

Compositions are also provided, e.g., an isolated nucleic acid molecule comprising a sequence as described in Tables 2A-68, including, e.g., those which are labeled; an expression vector comprising such nucleic acid; a host cell comprising such expression vector; an isolated  
10 polypeptide which is encoded by such a nucleic acid molecule comprising a sequence as described in Tables 2A-68; or an antibody that specifically binds the polypeptide. In particular embodiments, the antibody is: conjugated to an effector component, is conjugated to a detectable label (including, e.g., a fluorescent label, a radioisotope, or a cytotoxic chemical), an antibody fragment, or is a humanized antibody.

15 Additional methods are provided, including methods for specifically targeting a compound to a pathological cell in a patient, the method comprising administering to the patient an antibody, as described, thereby providing the targetting. Others include, e.g., methods for determining the presence or absence of a pathological cell in a patient, the methods comprising contacting a biological sample with an antibody, as described. In more particular methods, the  
20 antibody is: conjugated to an effector component, or to a fluorescent label; or the biological sample is a blood, serum, urine, or stool sample.

Further methods include those for identifying a compound that modulates a pathology-associated polypeptide, the method comprising steps of: contacting the compound with a pathology-associated polypeptide, the polypeptide encoded by a polynucleotide that selectively  
25 hybridizes to a sequence at least 80% identical to a sequence as described in Tables 2A-68; and determining the functional effect of the compound upon the polypeptide. Another drug screening assay method comprises steps of: administering a test compound to a mammal having a pathology of Table 1 or a cell isolated therefrom; and comparing the level of gene expression of a polynucleotide that selectively hybridizes to a sequence at least 80% identical to a sequence  
30 as described in Tables 2A-68 in a treated cell or mammal with the level of gene expression of the polynucleotide in a control cell or mammal, wherein a test compound that modulates the level of expression of the polynucleotide is a candidate for the treatment of the pathology.

## DETAILED DESCRIPTION OF THE INVENTION

In accordance with the objects outlined above, the present invention provides novel methods for diagnosis and prognosis evaluation for various disorders, e.g., angiogenesis, fibrosis, and various defined forms of cancer, including metastatic cancer, as well as methods for screening for compositions which modulate such conditions. Also provided are methods for treating such disorders or cancers. See, e.g., American Society of Clinical Oncology (ed. 2001) ASCO Curriculum: Symptom Management Kendall/Hunt, ISBN: 0787277851; Bonadonna, et al. (2001) Textbook of Breast Cancer (2d ed.) Dunitz Martin, ISBN: 1853178241; Devita and Hellman (eds. 2001) Cancer Principles and Practice of Oncology (2 vols.), Lippincott Williams, ISBN: 0781723876; Howell, et al. (2001) Breast Cancer Isis Medical Media, ISBN: 1901865584; Kaye and Laws (2001) Brain Tumours: An Encyclopedic Approach (2d ed.) Churchill Livingstone, ISBN: 0443064261; Mihm, et al. (2001) The Melanocytic Proliferation: A Comprehensive Textbook of Pigmented Lesions Wiley-Liss, ISBN: 0471252719; Montgomery and Aaron (2001) Clinical Pathology of Soft-Tissue Tumors Marcel Dekker, ISBN: 0824702905; Petrovich, et al. (eds. 2001) Combined Modality of Central Nervous System Tumors (Medical Radiology) Springer Verlag, ISBN: 3540660534; Rosen (2001) Rosen's Breast Pathology Lippincott Williams and Wilkins, ISBN: 0781723795; Shah, et al. (2001) Oral Cancer Isis Medical Media, ISBN: 189906687X; Weiss and Goldblum (2001) Enzinger and Weiss's Soft Tissue Tumors (4th ed.) Mosby, ISBN: 0323012000; Abeloff, et al. (eds. 2000) Clinical Oncology (2d ed.) Churchill Livingstone, ISBN: 044307545X; American Society of Clinical Oncology (ed. 2000) Cancer Genetics and Cancer Predisposition Testing Kendall/Hunt, ISBN: 0787276154; Fletcher (2000) Diagnostic Histopathology of Tumors (2 vols. 2d ed.) Churchill Livingstone, ISBN: 0443079927; Vogelzang (ed. 2000) Comprehensive Textbook of Genitourinary Oncology (2d ed.) Lippincott Williams and Wilkins, ISBN: 0683306456; Holland, et al. (eds. 2000) Holland-Frei Cancer Medicine (Book with CD-ROM 5th ed.) Decker, ISBN: 1550091131; Turrisi, et al. (2000) Lung Cancer Isis Medical Media, ISBN: 1901865428; Bartolozzi and Lencioni (eds. 1999) Liver Malignancies: Diagnostic and Interventional Radiology (Medical Radiology) Springer Verlag, ISBN: 3540647562; Gasparini (ed. 1999) Prognostic Variables in Node-Negative and Node-Positive Breast Cancer Kluwer, ISBN: 0792384474; Hansen (ed. 1999) The LASLC Textbook of Lung Cancer: International Association for the Study of Lung Cancer Dunitz Martin, ISBN: 1853177083; Raghavan, et al. (eds. 1999) Textbook of Uncommon Cancer (2nd ed.) Wiley, ISBN: 0471929212; Thawley, et

- al. (eds. 1999) Comprehensive Management of Head and Neck Tumors (2 vols.) Saunders, ISBN: 0721655823; Whittaker and Holmes (eds. 1999) Leukemia and Related Disorders (3d ed.) Blackwell Science, ISBN: 0865426074; Aapro (ed. 1998) OncoMedia: Medical Oncology (CD-ROM) Elsevier Science, ISBN: 0080427480; Abeloff (1998) Clinical Oncology (Library Version 2 CD-ROM Individual Version 2.0 Windows and Macintosh) Harcourt Brace, ISBN: 0443075557; Benson (ed. 1998) Gastrointestinal Oncology (Cancer Treatment and Research, CTAR 98) Kluwer, ISBN: 0792382056; Brambilla and Brambilla (eds. 1998) Lung Tumors: Fundamental Biology and Clinical Management (Vol 124) Marcel Dekker, ISBN: 0824701607; Canellos, et al. (eds. 1998) The Lymphomas Saunders, ISBN: 0721650309; Greenspan and Remagen (1998) Differential Diagnosis of Tumors and Tumor-Like Lesions of Bones and Joints Lippincott Williams and Wilkins Publishers, ISBN: 0397517106; Hiddemann (ed. 1998) Acute Leukemias VII: Experimental Approaches and Novel Therapies (Haematologie Und Bluttransfusion, Vol 39), Springer Verlag, ISBN: 3540635041; Husband and Reznick (1998) Imaging in Oncology (2 vols.) Mosby, ISBN: 1899066489; Leibel and Phillips (eds. 1998) Textbook of Radiation Oncology Saunders, ISBN: 0721653367; Maloney and Miller (eds. 1998) Cutaneous Oncology: Pathophysiology, Diagnosis, and Management Blackwell Science, ISBN: 0865425175; Mittal, et al. (eds. 1998) Advances in Radiation Therapy Kluwer, ISBN: 0792399811; Oldham (ed. 1998) Principles of Cancer Biotherapy (3d ed.) Kluwer, ISBN: 0792335074; Ozols (ed. 1998) Gynecologic Oncology Kluwer, ISBN: 0792380703; Parkin, et al. (eds. 1998) Cancer Incidence in Five Continents (Iarc Scientific Publications, No 143) Oxford University Press, ISBN: 9283221435; Perez and Brady (eds. 1998) Principles and Practice of Radiation Oncology Lippincott Williams and Wilkins, ISBN: 0397584164; Black, et al. (eds. 1997) Cancer of the Nervous System Blackwell Science, ISBN: 0865423849; Bonadonna, et al. (1997) Textbook of Breast Cancer: A Clinical Guide to Therapy Blackwell Science, ISBN: 1853173487; Pollock (ed. 1997) Surgical Oncology Kluwer, ISBN: 0792399005; Sheaves, et al. (eds. 1997) Clinical Endocrine Oncology Blackwell Science, ISBN: 086542862X; Vahrson (1997) Radiation Oncology of Gynecological Cancers Springer Verlag, ISBN: 0387567682; Walterhouse and Cohn (eds. 1997) Diagnostic and Therapeutic Advances in Pediatric Oncology Kluwer, ISBN: 0792399781; Aisner (ed. 1996) Comprehensive Textbook of Thoracic Oncology Lippincott, Williams and Wilkins, ISBN: 0683000624; Bertino, et al. (eds. 1996) Encyclopedia of Cancer (3 vols.) Academic, ISBN: 012093230X; Cavalli, et al. (1996) Textbook of Medical Oncology Dunitz Martin, ISBN: 1853172901;

Peckham, et al. (eds. 1995) Oxford Textbook of Oncology (2-Vols.) Oxford University Press, ISBN: 0192616854; and Freireich and Kantarjian (eds. 1996) Molecular Genetics and Therapy of Leukemia (Cancer Treatment and Research, V. 84) Kluwer, ISBN: 0792339126.

In particular, identification of markers selectively expressed on defined cancers allows  
5 for use of that expression in diagnostic, prognostic, or therapeutic methods. As such, the invention defines various compositions, e.g., nucleic acids, polypeptides, antibodies, and small molecule agonists/antagonists, which will be useful to selectively identify those markers. For example, therapeutic methods may take the form of protein therapeutics which use the marker expression for selective localization or modulation of function (for those markers which have a  
10 causative disease effect), for vaccines, identification of binding partners, or antagonism, e.g., using antisense or RNAi. The markers may be useful for molecular characterization of subsets of the diseases, e.g., as provided in Table 1, which subsets may actually require very different treatments. Moreover, the markers may also be important in related diseases to the specific disorders and cancers, e.g., which affect similar tissues in non-malignant diseases, or have  
15 similar mechanisms of induction/maintenance. Metastatic processes or characteristics may also be targeted. Diagnostic and prognostic uses are made available, e.g., to subset related but distinct diseases, or to determine treatment strategy. The detection methods may be based upon nucleic acid, e.g., PCR or hybridization techniques, or protein, e.g., ELISA, imaging, IHC, etc. The diagnosis may be qualitative or quantitative, and may detect increases or decreases in  
20 expression levels.

Tables 2B-66C provide unigene cluster identification numbers for the nucleotide sequence of genes that exhibit increased or decreased expression in cancer samples, particularly sequences involved in angiogenesis, prostate cancer (including androgen independent and taxol resistant prostate cancer), breast cancer, colorectal cancer, cervical cancer, bladder cancer, lung  
25 cancer, ovarian cancer, uterine cancer, glioblastoma, Ewing sarcoma, and lung fibrosis. Tables 2A-67 also provide an exemplar accession number that provides a nucleotide sequence that is part of the unigene cluster.

#### Definitions

The term "cancer protein" or "cancer polynucleotide" or "cancer-associated transcript"  
30 refers to nucleic acid and polypeptide polymorphic variants, alleles, mutants, and interspecies homologues that: (1) have a nucleotide sequence that has greater than about 60% nucleotide sequence identity, 65%, 70%, 75%, 80%, 85%, 90%, preferably about 92%, 94%, 96%, 97%,

98%, or 99% or greater nucleotide sequence identity, preferably over a region of over a region of at least about 25, 50, 100, 200, 500, 1000, or more nucleotides, to a nucleotide sequence of or associated with a gene of Tables 1-68; (2) bind to antibodies, e.g., polyclonal antibodies, raised against an immunogen comprising an amino acid sequence encoded by a nucleotide sequence of or associated with a gene of Tables 1-68, and conservatively modified variants thereof; (3) specifically hybridize under stringent hybridization conditions to a nucleic acid sequence, or the complement thereof of Tables 1-68 and conservatively modified variants thereof; or (4) have an amino acid sequence that has greater than about 60% amino acid sequence identity, 65%, 70%, 75%, 80%, 85%, preferably 90%, 91%, 93%, 95%, 97%, 98%, or 99% or greater amino  
5 sequence identity, preferably over a region of over a region of at least about 25, 50, 100, 200, 500, 1000, or more amino acids, to an amino acid sequence encoded by a nucleotide sequence of or associated with a gene of Tables 1-68. A polynucleotide or polypeptide sequence is typically from a mammal including, but not limited to, primate, e.g., human; rodent, e.g., rat, mouse, hamster; cow, pig, horse, sheep, or other mammal. A "cancer polypeptide" and a  
10 "cancer polynucleotide," include both naturally occurring or recombinant forms.

A "full length" cancer protein or nucleic acid refers to a cancer polypeptide or polynucleotide sequence, or a variant thereof, that contains elements normally contained in one or more naturally occurring, wild type cancer polynucleotide or polypeptide sequences. The "full length" may be prior to, or after, various stages of post-translational processing or splicing,  
15 including alternative splicing.

"Biological sample" as used herein is a sample of biological tissue or fluid that contains nucleic acids or polypeptides, e.g., of a cancer protein, polynucleotide, or transcript. Such samples include, but are not limited to, tissue isolated from primates, e.g., humans, or rodents, e.g., mice, and rats. Biological samples may also include sections of tissues such as biopsy and  
20 autopsy samples, frozen sections taken for histologic purposes, archival samples, blood, plasma, serum, sputum, stool, tears, mucus, hair, skin, etc. Biological samples also include explants and primary and/or transformed cell cultures derived from patient tissues. A biological sample is typically obtained from a eukaryotic organism, most preferably a mammal such as a primate e.g., chimpanzee or human; cow; dog; cat; a rodent, e.g., guinea pig, rat, mouse; rabbit; or a  
25 bird; reptile; or fish. Livestock and domestic animals are of interest.

"Providing a biological sample" means to obtain a biological sample for use in methods described in this invention. Most often, this will be done by removing a sample of cells from an

animal, but can also be accomplished by using previously isolated cells (e.g., isolated by another person, at another time, and/or for another purpose), or by performing the methods of the invention in vivo. Archival tissues or materials, having treatment or outcome history, will be particularly useful.

5           The terms "identical" or percent "identity," in the context of two or more nucleic acids or polypeptide sequences, refer to two or more sequences or subsequences that are the same or have a specified percentage of amino acid residues or nucleotides that are the same (e.g., about 70% identity, preferably 75%, 80%, 85%, 90%, 91%, 93%, 95%, 97%, 98%, 99%, or higher identity over a specified region, when compared and aligned for maximum correspondence over  
10 a comparison window or designated region) as measured using, e.g., a BLAST or BLAST 2.0 sequence comparison algorithms with default parameters described below, or by manual alignment and visual inspection (see, e.g., NCBI web site <http://www.ncbi.nlm.nih.gov/BLAST/> or the like). Such sequences are then said to be "substantially identical." This definition also refers to, or may be applied to, the complement of a test sequence. The definition also includes  
15 sequences that have deletions and/or insertions, substitutions, and naturally occurring, e.g., polymorphic or allelic variants, and man-made variants. As described below, the preferred algorithms can account for gaps and the like. Preferably, identity exists over a region that is at least about 25 amino acids or nucleotides in length, or more preferably over a region that is 50-100 amino acids or nucleotides in length.

20           For sequence comparison, typically one sequence acts as a reference sequence, to which test sequences are compared. When using a sequence comparison algorithm, test and reference sequences are entered into a computer, subsequence coordinates are designated, if necessary, and sequence algorithm program parameters are designated. Preferably, default program parameters can be used, or alternative parameters can be designated. The sequence comparison  
25 algorithm then calculates the percent sequence identities for the test sequences relative to the reference sequence, based on the program parameters.

          A "comparison window", as used herein, includes reference to a segment of contiguous positions selected from the group consisting typically of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150, in which a sequence may be compared to a  
30 reference sequence of the same number of contiguous positions after the two sequences are optimally aligned. Methods of alignment of sequences for comparison are well-known. Optimal alignment of sequences for comparison can be conducted, e.g., by the local homology

algorithm of Smith and Waterman (1981) Adv. Appl. Math. 2:482-489, by the homology alignment algorithm of Needleman and Wunsch (1970) J. Mol. Biol. 48:443-453, by the search for similarity method of Pearson and Lipman (1988) Proc. Nat'l. Acad. Sci. USA 85:2444-2448, by computerized implementations of these algorithms (GAP, BESTFIT, FASTA, and TFASTA  
5 in the Wisconsin Genetics Software Package, Genetics Computer Group, 575 Science Dr., Madison, WI), or by manual alignment and visual inspection (see, e.g., Ausubel, et al. (eds. 1995 and supplements) Current Protocols in Molecular Biology Wiley).

Preferred examples of algorithms that are suitable for determining percent sequence identity and sequence similarity include the BLAST and BLAST 2.0 algorithms, which are  
10 described in Altschul, et al. (1977) Nuc. Acids Res. 25:3389-3402 and Altschul, et al. (1990) J. Mol. Biol. 215:403-410. BLAST and BLAST 2.0 are used, with the parameters described herein, to determine percent sequence identity for the nucleic acids and proteins of the invention. Software for performing BLAST analyses is publicly available through the National Center for Biotechnology Information (<http://www.ncbi.nlm.nih.gov/>). This algorithm involves  
15 first identifying high scoring sequence pairs (HSPs) by identifying short words of length W in the query sequence, which either match or satisfy some positive-valued threshold score T when aligned with a word of the same length in a database sequence. T is referred to as the neighborhood word score threshold (Altschul, et al., *supra*). These initial neighborhood word hits act as seeds for initiating searches to find longer HSPs containing them. The word hits are  
20 extended in both directions along each sequence for as far as the cumulative alignment score can be increased.—Cumulative scores are calculated using, e.g., for nucleotide sequences, the parameters M (reward score for a pair of matching residues; always > 0) and N (penalty score for mismatching residues; always < 0). For amino acid sequences, a scoring matrix is used to calculate the cumulative score. Extension of the word hits in each direction are halted when: the  
25 cumulative alignment score falls off by the quantity X from its maximum achieved value; the cumulative score goes to zero or below, due to the accumulation of one or more negative-scoring residue alignments; or the end of either sequence is reached. The BLAST algorithm parameters W, T, and X determine the sensitivity and speed of the alignment. The BLASTN program (for nucleotide sequences) uses as defaults a wordlength (W) of 11, an expectation (E)  
30 of 10, M=5, N=-4 and a comparison of both strands. For amino acid sequences, the BLASTP program uses as defaults a wordlength of 3, and expectation (E) of 10, and the BLOSUM62



scoring matrix (see Henikoff and Henikoff (1992) Proc. Natl. Acad. Sci. USA 89:10915-919) alignments (B) of 50, expectation (E) of 10, M=5, N=4, and a comparison of both strands.

The BLAST algorithm also performs a statistical analysis of the similarity between two sequences. See, e.g., Karlin and Altschul (1993) Proc. Natl. Acad. Sci. USA 90:5873-5787.

5 One measure of similarity provided by the BLAST algorithm is the smallest sum probability (P(N)), which provides an indication of the probability by which a match between two nucleotide or amino acid sequences would occur by chance. For example, a nucleic acid is considered similar to a reference sequence if the smallest sum probability in a comparison of the test nucleic acid to the reference nucleic acid is less than about 0.2, more preferably less than  
10 about 0.01, and most preferably less than about 0.001. Log values may be negative large numbers, e.g., 5, 10, 20, 30, 40, 40, 70, 90, 110, 150, 170, etc.

An indication that two nucleic acid sequences are substantially identical is that the polypeptide encoded by the first nucleic acid is immunologically cross reactive with the antibodies raised against the polypeptide encoded by the second nucleic acid. Thus, a  
15 polypeptide is typically substantially identical to a second polypeptide, e.g., where the two peptides differ only by conservative substitutions. Another indication that two nucleic acid sequences are substantially identical is that the two molecules or their complements hybridize to each other under stringent conditions. Yet another indication that two nucleic acid sequences are substantially identical is that the same primers can be used to amplify the sequences.

20 A "host cell" is a naturally occurring cell or a transformed cell that contains an expression vector and supports the replication or expression of the expression vector. Host cells may be cultured cells, explants, cells in vivo, and the like. Host cells may be prokaryotic cells such as *E. coli*, or eukaryotic cells such as yeast, insect, amphibian, or mammalian cells such as CHO, HeLa, and the like (see, e.g., the American Type Culture Collection catalog or web site,  
25 [www.atcc.org](http://www.atcc.org)).

The terms "isolated," "purified," or "biologically pure" refer to material that is substantially or essentially free from components that normally accompany it as found in its native state. Purity and homogeneity are typically determined using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid  
30 chromatography. A protein or nucleic acid that is the predominant species present in a preparation is substantially purified. In particular, an isolated nucleic acid is separated from some open reading frames that naturally flank the gene and encode proteins other than protein

encoded by the gene. The term "purified" in some embodiments denotes that a nucleic acid or protein gives rise to essentially one band in an electrophoretic gel. Preferably, it means that the nucleic acid or protein is at least about 85% pure, more preferably at least 95% pure, and most preferably at least 99% pure. "Purify" or "purification" in other embodiments means removing  
5 at least one contaminant or component from the composition to be purified. In this sense, purification does not require that the purified compound be homogeneous, e.g., 100% pure.

The terms "polypeptide," "peptide," and "protein" are used interchangeably herein to refer to a polymer of amino acid residues. The terms apply to amino acid polymers in which one or more amino acid residue is an artificial chemical mimetic of a corresponding naturally  
10 occurring amino acid, as well as to naturally occurring amino acid polymers, those containing modified residues, and non-naturally occurring amino acid polymers.

The term "amino acid" refers to naturally occurring and synthetic amino acids, as well as amino acid analogs and amino acid mimetics that function similarly to the naturally occurring amino acids. Naturally occurring amino acids are those encoded by the genetic code, as well as  
15 those amino acids that are later modified, e.g., hydroxyproline,  $\gamma$ -carboxyglutamate, and O-phosphoserine. Amino acid analogs refers to compounds that have the same basic chemical structure as a naturally occurring amino acid, e.g., an  $\alpha$  carbon that is bound to a hydrogen, a carboxyl group, an amino group, and an R group, e.g., homoserine, norleucine, methionine sulfoxide, methionine methyl sulfonium. Such analogs may have modified R groups (e.g.,  
20 norleucine) or modified peptide backbones, but retain some basic chemical structure as a naturally occurring amino acid. Amino acid mimetic refers to a chemical compound that has a structure that is different from the general chemical structure of an amino acid, but that functions similarly to another amino acid.

Amino acids may be referred to herein by either their commonly known three letter  
25 symbols or by the one-letter symbols recommended by the IUPAC-IUB Biochemical Nomenclature Commission. Nucleotides, likewise, may be referred to by their commonly accepted single-letter codes.

"Conservatively modified variant" applies to both amino acid and nucleic acid sequences. With respect to particular nucleic acid sequences, conservatively modified variants  
30 refers to those nucleic acids which encode identical or essentially identical amino acid sequences, or where the nucleic acid does not encode an amino acid sequence, to essentially identical or associated, e.g., naturally contiguous, sequences. Because of the degeneracy of the

genetic code, a large number of functionally identical nucleic acids encode most proteins. For instance, the codons GCA, GCC, GCG, and GCU each encode the amino acid alanine. Thus, at each position where an alanine is specified by a codon, the codon can be altered to another of the corresponding codons described without altering the encoded polypeptide. Such nucleic acid variations are "silent variations," which are one species of conservatively modified variations. Every nucleic acid sequence herein which encodes a polypeptide also describes silent variations of the nucleic acid. In certain contexts each codon in a nucleic acid (except AUG, which is ordinarily the only codon for methionine, and TGG, which is ordinarily the only codon for tryptophan) can be modified to yield a functionally similar molecule. Accordingly, a silent variation of a nucleic acid which encodes a polypeptide is implicit in a described sequence with respect to the expression product, but not necessarily with respect to actual probe sequences.

As to amino acid sequences, one of skill will recognize that individual substitutions, deletions, or additions to a nucleic acid, peptide, polypeptide, or protein sequence which alters, adds, or deletes a single amino acid or a small percentage of amino acids in the encoded sequence is a "conservatively modified variant" where the alteration results in the substitution of an amino acid with a chemically similar amino acid. Conservative substitution tables providing functionally similar amino acids are well known. Such conservatively modified variants are in addition to and do not exclude polymorphic variants, interspecies homologs, and alleles of the invention. Typically conservative substitutions include for one another: 1) Alanine (A), Glycine (G); 2) Aspartic acid (D), Glutamic acid (E); 3) Asparagine (N), Glutamine (Q); 4) Arginine (R), Lysine (K); 5) Isoleucine (I), Leucine (L), Methionine (M), Valine (V); 6) Phenylalanine (F), Tyrosine (Y), Tryptophan (W); 7) Serine (S), Threonine (T); and 8) Cysteine (C), Methionine (M) (see, e.g., Creighton (1984) Proteins: Structure and Molecular Properties Freeman).

Macromolecular structures such as polypeptide structures can be described in terms of various levels of organization. For a general discussion of this organization, see, e.g., Alberts, et al. (eds. 2001) Molecular Biology of the Cell (4th ed.) Garland; and Cantor and Schimmel (1980) Biophysical Chemistry Part I: The Conformation of Biological Macromolecules Freeman. "Primary structure" refers to the amino acid sequence of a particular peptide. "Secondary structure" refers to locally ordered, three dimensional structures within a polypeptide. These structures are commonly known as domains. Domains are portions of a

polypeptide that often form a compact unit of the polypeptide and are typically 25 to approximately 500 amino acids long. Typical domains are made up of sections of lesser organization such as stretches of  $\beta$ -sheet and  $\alpha$ -helices. "Tertiary structure" refers to the complete three dimensional structure of a polypeptide monomer. "Quaternary structure" refers to the three dimensional structure formed, usually by the noncovalent association of independent tertiary units. Anisotropic terms are also known as energy terms.

"Nucleic acid" or "oligonucleotide" or "polynucleotide" or grammatical equivalents used herein means at least two nucleotides covalently linked together. Oligonucleotides are typically from about 5, 6, 7, 8, 9, 10, 12, 15, 25, 30, 40, 50, or more nucleotides in length, up to about 100 nucleotides in length. Nucleic acids and polynucleotides are a polymers of any length, including longer lengths, e.g., 200, 300, 500, 1000, 2000, 3000, 5000, 7000, 10,000, etc. A nucleic acid of the present invention will generally contain phosphodiester bonds, although in some cases, nucleic acid analogs are included that may have at least one different linkage, e.g., phosphoramidate, phosphorothioate, phosphorodithioate, or O-methylphosphoroamidite linkages (see Eckstein (1992) Oligonucleotides and Analogues: A Practical Approach Oxford Univ. Press); and peptide nucleic acid backbones and linkages. Other analog nucleic acids include those with positive backbones; non-ionic backbones, and non-ribose backbones, including those described in U.S. Patent Nos. 5,235,033 and 5,034,506, and Chapters 6 and 7 of Sanghvi and Cook (eds. 1994) Carbohydrate Modifications in Antisense Research ACS Symposium Series 580. Nucleic acids containing one or more carbocyclic sugars are also included within one definition of nucleic acids. Modifications of the ribose-phosphate backbone may be done for a variety of reasons, e.g., to increase the stability and half-life of such molecules in physiological environments or as probes on a biochip. Mixtures of naturally occurring nucleic acids and analogs can be made; alternatively, mixtures of different nucleic acid analogs, and mixtures of naturally occurring nucleic acids and analogs may be made.

A variety of references disclose such nucleic acid analogs, including, e.g., phosphoramidate (Beaucage, et al. (1993) Tetrahedron 49:1925-1963 and references therein; Letsinger (1970) J. Org. Chem. 35:3800-3803; Sprinzl, et al. (1977) Eur. J. Biochem. 81:579-589; Letsinger, et al. (1986) Nucl. Acids Res. 14:3487-499; Sawai, et al. (1984) Chem. Lett. 805; Letsinger, et al. (1988) J. Am. Chem. Soc. 110:4470-4471; and Pauwels, et al. (1986) Chemica Scripta 26:141-149), phosphorothioate (Mag, et al. (1991) Nucleic Acids Res. 19:1437-441; and U.S. Patent No. 5,644,048), phosphorodithioate (Brill, et al. (1989) J. Am.

- Chem. Soc. 111:2321-2322), O-methylphosphoroamidite linkages (see Eckstein (1992) Oligonucleotides and Analogues: A Practical Approach, Oxford Univ. Press), and peptide nucleic acid backbones and linkages (see Egholm (1992) J. Am. Chem. Soc. 114:1895-1897; Meier, et al. (1992) Chem. Int. Ed. Engl. 31:1008-1010; Nielsen (1993) Nature 365:566-568;
- 5 Carlsson, et al. (1996) Nature 380:207, all of which are incorporated by reference). Other analog nucleic acids include those with positive backbones (Denpcy, et al. (1995) Proc. Natl. Acad. Sci. USA 92:6097-101; non-ionic backbones (U.S. Patent Nos. 5,386,023, 5,637,684, 5,602,240, 5,216,141, and 4,469,863; Kiedrowski, et al. (1991) Angew. Chem. Intl. Ed. English 30:423-426; Letsinger, et al. (1988) J. Am. Chem. Soc. 110:4470-4471; Letsinger, et al. (1994)
- 10 Nucleoside and Nucleotide 13:1597-xxx; Chapters 2 and 3 in Sanghvi and Cook (eds. 1994) Carbohydrate Modifications in Antisense Research ACS Symposium Series 580; Mesmaeker, et al. (1994) Bioorganic and Medicinal Chem. Lett. 4:395-398; Jeffs, et al. (1994) J. Biomolecular NMR 34:17; Horn, et al. (1996) Tetrahedron Lett. 37:743-xxx) and non-ribose backbones, including those described in U.S. Patent Nos. 5,235,033 and 5,034,506, and Chapters 6 and 7 in
- 15 Sanghvi and Cook (eds. 1994) Carbohydrate Modifications in Antisense Research ACS Symposium Series 580. Nucleic acids containing one or more carbocyclic sugars are also included within one definition of nucleic acids (see Jenkins, et al. (1995) Chem. Soc. Rev. pp 169-176). Several nucleic acid analogs are described in Rawls (page 35, June 2, 1997) C&E News.
- 20 Particularly preferred are peptide nucleic acids (PNA) which includes peptide nucleic acid analogs. These backbones are substantially non-ionic under neutral conditions, in contrast to the highly charged phosphodiester backbone of naturally occurring nucleic acids. This results in at least two advantages. The PNA backbone exhibits improved hybridization kinetics. PNAs have larger changes in the melting temperature ( $T_m$ ) for mismatched versus perfectly
- 25 matched basepairs. DNA and RNA typically exhibit a 2-4° C drop in  $T_m$  for an internal mismatch. With the non-ionic PNA backbone, the drop is closer to 7-9° C. Similarly, due to their non-ionic nature, hybridization of the bases attached to these backbones is relatively insensitive to salt concentration. In addition, PNAs are not degraded by cellular enzymes, and thus can be more stable.
- 30 The nucleic acids may be single stranded or double stranded, as specified, or contain portions of both double stranded or single stranded sequence. The depiction of a single strand also defines the sequence of the complementary strand; thus the sequences described herein also

provide the complement of the sequence. The nucleic acid may be DNA, both genomic and cDNA, RNA, or a hybrid, where the nucleic acid may contain combinations of deoxyribo- and ribo-nucleotides, and combinations of bases, including uracil, adenine, thymine, cytosine, guanine, inosine, xanthine hypoxanthine, isocytosine, isoguanine, etc. "Transcript" typically refers to a naturally occurring RNA, e.g., a pre-mRNA, hnRNA, or mRNA. As used herein, the term "nucleoside" includes nucleotides and nucleoside and nucleotide analogs, and modified nucleosides such as amino modified nucleosides. In addition, "nucleoside" includes non-naturally occurring analog structures. Thus, e.g., the individual units of a peptide nucleic acid, each containing a base, are referred to herein as a nucleoside.

10 A "label" or a "detectable moiety" is a composition detectable by spectroscopic, photochemical, biochemical, immunochemical, physiological, chemical, or other physical means. In general, labels fall into three classes: a) isotopic labels, which may be radioactive or heavy isotopes; b) immune labels, which may be antibodies, antigens, or epitope tags; and c) colored or fluorescent dyes. The labels may be incorporated into the cancer nucleic acids, proteins, and antibodies. For example, the label should be capable of producing, either directly or indirectly, a detectable signal. The detectable moiety may be a radioisotope, such as  $^3\text{H}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , or  $^{125}\text{I}$ , electron-dense reagents, a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin, or an enzyme (e.g., as commonly used in an ELISA), biotin, digoxigenin, or haptens and proteins or other entities which can be made detectable such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Methods are known for conjugating the antibody to the label. See, e.g., Hunter, et al. (1962) Nature 144:945; David, et al. (1974) Biochemistry 13:1014-1021; Pain, et al. (1981) J. Immunol. Meth. 40:219-230; and Nygren (1982) J. Histochem. and Cytochem. 30:407-412.

25 An "effector" or "effector moiety" or "effector component" is a molecule that is bound (or linked, or conjugated), either covalently, through a linker or a chemical bond, or noncovalently, through ionic, van der Waals, electrostatic, or hydrogen bonds, to an antibody. The "effector" can be a variety of molecules including, e.g., detection moieties including radioactive compounds, fluorescent compounds, enzymes or substrates, tags such as epitope tags, toxins; activatable moieties, chemotherapeutic agents; lipases; antibiotics; or radioisotopes, e.g., emitting "hard" beta, radiation.

30 A "labeled nucleic acid probe or oligonucleotide" is one that is bound, e.g., covalently, through a linker or a chemical bond, or noncovalently, through ionic, van der Waals,

electrostatic, or hydrogen bonds to a label such that the presence of the probe may be detected by detecting the presence of the label bound to the probe. Alternatively, methods using high affinity interactions may achieve the same results where one of a pair of binding partners binds to the other, e.g., biotin, streptavidin.

5           As used herein a "nucleic acid probe or oligonucleotide" is a nucleic acid capable of binding to a target nucleic acid of complementary sequence through one or more types of chemical bonds, usually through complementary base pairing, e.g., through hydrogen bond formation. As used herein, a probe may include natural (e.g., A, G, C, or T) or modified bases (7-deazaguanosine, inosine, etc.). In addition, the bases in a probe may be joined by a linkage  
10 other than a phosphodiester bond, preferably one that does not functionally interfere with hybridization. Thus, e.g., probes may be peptide nucleic acids in which the constituent bases are joined by peptide bonds rather than phosphodiester linkages. Probes may bind target sequences lacking complete complementarity with the probe sequence depending upon the stringency of the hybridization conditions. The probes are preferably directly labeled, e.g., with  
15 isotopes, chromophores, lumiphores, chromogens, or indirectly labeled, e.g., with biotin to which a streptavidin complex may later bind. By assaying for the presence or absence of the probe, one can detect the presence or absence of the select sequence or subsequence. Diagnosis or prognosis may be based at the genomic level, or at the level of RNA or protein expression.

          The term "recombinant" when used with reference, e.g., to a cell, or nucleic acid,  
20 protein, or vector, indicates that the cell, nucleic acid, protein, or vector, has been modified by the introduction of a heterologous nucleic acid or protein or the alteration of a native nucleic acid or protein, or that the cell is derived from a cell so modified. Thus, e.g., recombinant cells express genes that are not found within the native (non-recombinant) form of the cell or express native genes that are otherwise abnormally expressed, under expressed, or not expressed at all.  
25 By the term "recombinant nucleic acid" herein is meant nucleic acid, originally formed in vitro, in general, by the manipulation of nucleic acid, e.g., using polymerases and endonucleases, in a form not normally found in nature. In this manner, operably linkage of different sequences is achieved. Thus an isolated nucleic acid, in a linear form, or an expression vector formed in vitro by ligating DNA molecules that are not normally joined, are both considered recombinant  
30 for the purposes of this invention. It is understood that once a recombinant nucleic acid is made and reintroduced into a host cell or organism, it will replicate non-recombinantly, e.g., using the in vivo cellular machinery of the host cell rather than in vitro manipulations; however, such

nucleic acids, once produced recombinantly, although subsequently replicated non-recombinantly, are still considered recombinant for the purposes of the invention.

Similarly, a "recombinant protein" is a protein made using recombinant techniques, e.g., through the expression of a recombinant nucleic acid as depicted above. A recombinant protein is distinguished from naturally occurring protein by at least one or more characteristics. The protein may be isolated or purified away from some or most of the proteins and compounds with which it is normally associated in its wild type host, and thus may be substantially pure. An isolated protein is unaccompanied by at least some of the material with which it is normally associated in its natural state, preferably constituting at least about 0.5%, more preferably at least about 5% by weight of the total protein in a given sample. A substantially pure protein comprises at least about 75% by weight of the total protein, with at least about 80% being preferred, and at least about 90% being particularly preferred. The definition includes the production of a skin cancer protein from one organism in a different organism or host cell. Alternatively, the protein may be made at a significantly higher concentration than is normally seen, through the use of an inducible promoter or high expression promoter, such that the protein is made at increased concentration levels. Alternatively, the protein may be in a form not normally found in nature, as in the addition of an epitope tag or amino acid substitutions, insertions and deletions, as discussed below.

The term "heterologous" when used with reference to portions of a nucleic acid indicates that the nucleic acid comprises two or more subsequences that are not normally found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences, e.g., from unrelated genes arranged to make a new functional nucleic acid, e.g., a promoter from one source and a coding region from another source. Similarly, a heterologous protein will often refer to two or more subsequences that are not found in the same relationship to each other in nature (e.g., a fusion protein).

A "promoter" is typically an array of nucleic acid control sequences that direct transcription of a nucleic acid. As used herein, a promoter includes necessary nucleic acid sequences near the start site of transcription, such as, in the case of a polymerase II type promoter, a TATA element. A promoter also optionally includes distal enhancer or repressor elements, which can be located as much as several thousand base pairs from the start site of transcription. A "constitutive" promoter is a promoter that is active under most environmental and developmental conditions. An "inducible" promoter is a promoter that is active under



environmental or developmental regulation. The term "operably linked" refers to a functional linkage between a nucleic acid expression control sequence (such as a promoter, or array of transcription factor binding sites) and a second nucleic acid sequence, e.g., wherein the expression control sequence directs transcription of the nucleic acid corresponding to the second  
5 sequence.

An "expression vector" is a nucleic acid construct, generated recombinantly or synthetically, with a series of specified nucleic acid elements that permit transcription of a particular nucleic acid in a host cell. The expression vector can be part of a plasmid, virus, or nucleic acid fragment. Typically, the expression vector includes a nucleic acid to be transcribed  
10 in operable linkage to a promoter.

The phrase "selectively (or specifically) hybridizes to" refers to the binding, duplexing, or hybridizing of a molecule selectively to a particular nucleotide sequence under stringent hybridization conditions when that sequence is present in a complex mixture (e.g., total cellular or library DNA or RNA).

15 The phrase "stringent hybridization conditions" refers to conditions under which a probe will hybridize to its target subsequence, typically in a complex mixture of nucleic acids, but to no other sequences. Stringent conditions are sequence-dependent and will be different in different circumstances. Longer sequences hybridize specifically at higher temperatures. An extensive guide to the hybridization of nucleic acids is found in "Overview of principles of  
20 hybridization and the strategy of nucleic acid assays" in Tijssen (1993) Hybridization with Nucleic Probes (Laboratory Techniques in Biochemistry and Molecular Biology) (vol. 24) Elsevier. Generally, stringent conditions are selected to be about 5-10° C lower than the thermal melting point ( $T_m$ ) for the specific sequence at a defined ionic strength pH. The  $T_m$  is the temperature (under defined ionic strength, pH, and nucleic concentration) at which 50% of  
25 the probes complementary to the target hybridize to the target sequence at equilibrium (as the target sequences are present in excess, at  $T_m$ , 50% of the probes are occupied at equilibrium). Stringent conditions will be those in which the salt concentration is less than about 1.0 M sodium ion, typically about 0.01-1.0 M sodium ion concentration (or other salts) at pH 7.0 to 8.3 and the temperature is at least about 30° C for short probes (e.g., about 10-50 nucleotides)  
30 and at least about 60° C for long probes (e.g., greater than about 50 nucleotides). Stringent conditions may also be achieved with the addition of destabilizing agents such as formamide. For selective or specific hybridization, a positive signal is typically at least two times

background, preferably 10 times background hybridization. Exemplary stringent hybridization conditions can be as following: 50% formamide, 5x SSC, and 1% SDS, incubating at 42° C, or, 5x SSC, 1% SDS, incubating at 65° C, with wash in 0.2x SSC, and 0.1% SDS at 65° C. For PCR, a temperature of about 36° C is typical for low stringency amplification, although  
5 annealing temperatures may vary between about 32°-48° C depending on primer length. For high stringency PCR amplification, a temperature of about 62° C is typical, although high stringency annealing temperatures can range from about 50-65° C, depending on the primer length and specificity. Typical cycle conditions for both high and low stringency amplifications include a denaturation phase of 90-95° C for 30-120 sec, an annealing phase lasting 30-120 sec,  
10 and an extension phase of about 72° C for 1-2 min. Protocols and guidelines for low and high stringency amplification reactions are provided, e.g., in Innis, et al. (1990) PCR Protocols: A Guide to Methods and Applications, Academic Press, NY.

Nucleic acids that do not hybridize to each other under stringent conditions are still substantially identical if the polypeptides which they encode are substantially identical. This  
15 occurs, e.g., when a copy of a nucleic acid is created using the maximum codon degeneracy permitted by the genetic code. In such cases, the nucleic acids typically hybridize under moderately stringent hybridization conditions. Exemplary "moderately stringent hybridization conditions" include a hybridization in a buffer of 40% formamide, 1 M NaCl, 1% SDS at 37° C, and a wash in 1X SSC at 45° C. A positive hybridization is typically at least twice background.  
20 Alternative hybridization and wash conditions can be utilized to provide conditions of similar stringency. Additional guidelines for determining hybridization parameters are provided in numerous references, e.g., Ausubel, et al. (eds. 1991 and supplements) Current Protocols in Molecular Biology Wiley.

The phrase "functional effects" in the context of assays for testing compounds that  
25 modulate activity of a cancer protein includes the determination of a parameter that is indirectly or directly under the influence of the cancer protein or nucleic acid, e.g., a physiological, functional, physical, or chemical effect, such as the ability to decrease cancer. It includes ligand binding activity; cell viability; cell growth on soft agar; anchorage dependence; contact inhibition and density limitation of growth; cellular proliferation; cellular transformation;  
30 growth factor or serum dependence; tumor specific marker levels; invasiveness into Matrigel; tumor growth and metastasis in vivo; mRNA and protein expression in cells undergoing

metastasis; and other characteristics of cancer cells. "Functional effects" include in vitro, in vivo, and ex vivo activities.

By "determining the functional effect" is meant assaying for a compound that increases or decreases a parameter that is indirectly or directly under the influence of a cancer protein sequence, e.g., physiological, functional, enzymatic, physical, or chemical effects. Such functional effects can be measured, e.g., changes in spectroscopic characteristics (e.g., fluorescence, absorbance, refractive index), hydrodynamic (e.g., shape), chromatographic, or solubility properties for the protein, measuring inducible markers or transcriptional activation of the cancer protein, measuring binding activity or binding assays, e.g., binding to antibodies or other ligands, and measuring growth, cellular proliferation, cell viability, cellular transformation, growth factor or serum dependence, tumor specific marker levels, invasiveness into Matrigel, tumor growth and metastasis in vivo, mRNA and protein expression, and other characteristics of cancer cells. The functional effects can be evaluated by many means, e.g., microscopy for quantitative or qualitative measures of alterations in morphological features, measurement of changes in RNA or protein levels for cancer-associated sequences, measurement of RNA stability, identification of downstream or reporter gene expression (CAT, luciferase,  $\beta$ -gal, GFP, and the like), e.g., via chemiluminescence, fluorescence, colorimetric reactions, antibody binding, inducible markers, and ligand binding assays.

"Inhibitors", "activators," and "modulators" of cancer polynucleotide and polypeptide sequences are used to refer to activating, inhibitory, or modulating molecules or compounds identified using in vitro and in vivo assays of cancer polynucleotide and polypeptide sequences. Inhibitors are compounds that, e.g., bind to, partially or totally block activity, decrease, prevent, delay activation, inactivate, desensitize, or down regulate the activity or expression of cancer proteins, e.g., antagonists. Antisense or inhibitory nucleic acids may seem to inhibit expression and subsequent function of the protein. "Activators" are compounds that increase, open, activate, facilitate, enhance activation, sensitize, agonize, or up regulate cancer protein activity. Inhibitors, activators, or modulators also include genetically modified versions of cancer proteins, e.g., versions with altered activity, as well as naturally occurring and synthetic ligands, antagonists, agonists, antibodies, small chemical molecules, and the like. Such assays for inhibitors and activators include, e.g., expressing the cancer protein in vitro, in cells, or cell membranes, applying putative modulator compounds, and then determining the functional effects on activity, as described above. Activators and inhibitors of cancer can also be identified

by incubating cancer cells with the test compound and determining increases or decreases in the expression of 1 or more cancer proteins, e.g., 1, 2, 3, 4, 5, 10, 15, 20, 25, 30, 40, 50, or more cancer proteins, such as cancer proteins encoded by the sequences set out in Tables 1-68.

Samples or assays comprising cancer proteins that are treated with a potential activator, inhibitor, or modulator are compared to control samples without the inhibitor, activator, or modulator to examine the extent of inhibition. Control samples (untreated with inhibitors) are assigned a relative protein activity value of 100%. Inhibition of a polypeptide is achieved when the activity value relative to the control is about 80%, preferably 50%, more preferably 25-0%. Activation of a cancer polypeptide is achieved when the activity value relative to the control (untreated with activators) is 110%, more preferably 150%, more preferably 200-500% (e.g., two to five fold higher relative to the control), more preferably 1000-3000% higher.

The phrase "changes in cell growth" refers to any change in cell growth and proliferation characteristics in vitro or in vivo, such as cell viability, formation of foci, anchorage independence, semi-solid or soft agar growth, changes in contact inhibition and density limitation of growth, loss of growth factor or serum requirements, changes in cell morphology, gaining or losing immortalization, gaining or losing tumor specific markers, ability to form or suppress tumors when injected into suitable animal hosts, and/or immortalization of the cell. See, e.g., pp. 231-241 in Freshney (1994) Culture of Animal Cells a Manual of Basic Technique (2d ed.) Wiley-Liss.

"Tumor cell" refers to precancerous, cancerous, and normal cells in a tumor.

"Cancer cells," "transformed" cells or "transformation" in tissue culture, refers to spontaneous or induced phenotypic changes that do not necessarily involve the uptake of new genetic material. Although transformation can arise from infection with a transforming virus and incorporation of new genomic DNA, or uptake of exogenous DNA, it can also arise spontaneously or following exposure to a carcinogen, thereby mutating an endogenous gene. Transformation is associated with phenotypic changes, such as immortalization of cells, aberrant growth control, nonmorphological changes, and/or malignancy. See, Freshney (2000) Culture of Animal Cells: A Manual of Basic Technique (4th ed.) Wiley-Liss.

"Antibody" refers to a polypeptide comprising a framework region from an immunoglobulin gene or fragments thereof that specifically binds and recognizes an antigen. The recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as the myriad immunoglobulin variable region genes.

Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. Typically, the antigen-binding region of an antibody or its functional equivalent will be most critical in specificity and affinity of binding. See Paul (ed. 1999) Fundamental Immunology (4th ed.) Raven.

5 An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of polypeptide chains, each pair having one "light" (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen  
10 recognition. The terms variable light chain ( $V_L$ ) and variable heavy chain ( $V_H$ ) refer to these light and heavy chains respectively.

Antibodies exist, e.g., as intact immunoglobulins or as a number of well-characterized fragments produced by digestion with various peptidases. Thus, e.g., pepsin digests an antibody below the disulfide linkages in the hinge region to produce  $F(ab)'_2$ , a dimer of Fab which itself  
15 is a light chain joined to  $V_H$ - $CH_1$  by a disulfide bond. The  $F(ab)'_2$  may be reduced under mild conditions to break the disulfide linkage in the hinge region, thereby converting the  $F(ab)'_2$  dimer into an Fab' monomer. The Fab' monomer is essentially Fab with part of the hinge region (see Paul (ed. 1999) Fundamental Immunology (4th ed.) Raven. While various antibody fragments are defined in terms of the digestion of an intact antibody, one of skill will appreciate  
20 that such fragments may be synthesized de novo either chemically or by using recombinant DNA methodology. Thus, the term antibody, as used herein, also includes antibody fragments either produced by the modification of whole antibodies, or those synthesized de novo using recombinant DNA methodologies (e.g., single chain Fv) or those identified using phage display libraries (see, e.g., McCafferty, et al. (1990) Nature 348:552-554).

25 For preparation of antibodies, e.g., recombinant, monoclonal, or polyclonal antibodies, many techniques known. See, e.g., Kohler and Milstein (1975) Nature 256:495-497; Kozbor, et al. (1983) Immunology Today 4:72; Cole, et al. (1985) pp. 77-96 in Reisfeld and Sell (1985) Monoclonal Antibodies and Cancer Therapy Liss; Coligan (1991) Current Protocols in Immunology Lippincott; Harlow and Lane (1988) Antibodies: A Laboratory Manual CSH  
30 Press; and Goding (1986) Monoclonal Antibodies: Principles and Practice (2d ed.) Academic Press. Techniques for the production of single chain antibodies (U.S. Patent 4,946,778) can be adapted to produce antibodies to polypeptides of this invention. Also, transgenic mice, or other

organisms such as other mammals, may be used to express humanized antibodies.

Alternatively, phage display technology can be used to identify antibodies and heteromeric Fab fragments that specifically bind to selected antigens. See, e.g., McCafferty, et al. (1990) Nature 348:552-554; Marks, et al. (1992) Biotechnology 10:779-783.

- 5           A "chimeric antibody" is an antibody molecule in which (a) the constant region, or a portion thereof, is altered, replaced, or exchanged so that the antigen binding site (variable region) is linked to a constant region of a different or altered class, effector function, and/or species, or an entirely different molecule which confers new properties to the chimeric antibody, e.g., an enzyme, toxin, hormone, growth factor, drug, etc.; or (b) the variable region, or a  
10           portion thereof, is altered, replaced, or exchanged with a variable region having a different or altered antigen specificity.

#### Identification of cancer-associated sequences

- In one aspect, the expression levels of genes are determined in different patient samples for which diagnosis information is desired, to provide expression profiles. An expression  
15           profile of a particular sample is essentially a "fingerprint" of the state of the sample; while two states may have any particular gene similarly expressed, the evaluation of a number of genes simultaneously allows the generation of a gene expression profile that is characteristic of the state of the cell. That is, normal tissue may be distinguished from cancerous or metastatic cancerous tissue, or cancer tissue or metastatic cancerous tissue can be compared with tissue  
20           from surviving cancer patients. By comparing expression profiles of tissue in known different cancer states, information regarding which genes are important (including both up-and down-regulation of genes) in each of these states is obtained. Molecular profiling may distinguish subtypes of a currently collective disease designation, e.g., different forms of a cancer.

- The identification of sequences that are differentially expressed in cancer versus non-  
25           cancer tissue allows the use of this information in a number of ways. For example, a particular treatment regime may be evaluated: does a chemotherapeutic drug act to down-regulate cancer, and thus tumor growth or recurrence, in a particular patient. Alternatively, a treatment step may induce other markers which may be used as targets to destroy tumor cells. Similarly, diagnosis and treatment outcomes may be done or confirmed by comparing patient samples with the  
30           known expression profiles. Malignant disease may be compared to non-malignant conditions. Metastatic tissue can also be analyzed to determine the stage of cancer in the tissue, or origin of primary tumor, e.g., metastasis from a remote primary site. Furthermore, these gene expression

profiles (or individual genes) allow screening of drug candidates with an eye to mimicking or altering a particular expression profile; e.g., screening can be done for drugs that suppress the cancer expression profile. This may be done by making biochips comprising sets of the important cancer genes, which can then be used in these screens. These methods can also be  
5 done on the protein basis; that is, protein expression levels of the cancer proteins can be evaluated for diagnostic purposes or to screen candidate agents. In addition, the cancer nucleic acid sequences can be administered for gene therapy purposes, including the administration of antisense nucleic acids, or the cancer proteins (including antibodies and other modulators thereof) administered as therapeutic drugs.

10 Thus the present invention provides nucleic acid and protein sequences that are differentially expressed in cancer relative to normal tissues and/or non-malignant disease, or in different types of related diseases, herein termed "cancer sequences." As outlined below, cancer sequences include those that are up-regulated (e.g., expressed at a higher level) in cancer, as well as those that are down-regulated (e.g., expressed at a lower level). In a preferred  
15 embodiment, the cancer sequences are from humans; however, cancer sequences from other organisms may be useful in animal models of disease and drug evaluation; thus, other cancer sequences are provided, from vertebrates, including mammals, including rodents (rats, mice, hamsters, guinea pigs, etc.), primates, farm animals (including sheep, goats, pigs, cows, horses, etc.) and pets (e.g., dogs, cats, etc.). Cancer sequences from other organisms may be obtained  
20 using the techniques outlined below.

Cancer sequences can include both nucleic acid and amino acid sequences. In a preferred embodiment, the skin cancer sequences are recombinant nucleic acids. These nucleic acid sequences are useful in a variety of applications, including diagnostic applications, which will detect naturally occurring nucleic acids, as well as screening applications; e.g., biochips  
25 comprising nucleic acid probes or PCR microtiter plates with selected probes to the cancer sequences.

A cancer sequence can be initially identified by substantial nucleic acid and/or amino acid sequence homology to the cancer sequences outlined herein. Such homology can be based upon the overall nucleic acid or amino acid sequence, and is generally determined as outlined  
30 below, e.g., using homology programs or hybridization conditions.

For identifying cancer-associated sequences, the cancer screen typically includes comparing genes identified in different tissues, e.g., normal and cancerous tissues, cancer and

non-malignant conditions, non-malignant conditions and normal tissues, or tumor tissue samples from patients who have metastatic disease vs. non metastatic tissue. Other suitable tissue comparisons include comparing cancer samples with metastatic cancer samples from other cancers, such as lung, stomach, gastrointestinal cancers, etc. Samples of different stages of cancer, e.g., survivor tissue, drug resistant states, and tissue undergoing metastasis, are applied to biochips comprising nucleic acid probes. The samples are first microdissected, if applicable, and treated for preparation of mRNA. Suitable biochips are commercially available, e.g., from Affymetrix, Santa Clara, CA. Gene expression profiles as described herein are generated and the data analyzed.

10 In one embodiment, the genes showing changes in expression as between normal and disease states are compared to genes expressed in other normal tissues, including, and not limited to lung, heart, brain, liver, stomach, kidney, muscle, colon, small intestine, large intestine, spleen, bone, and/or placenta. In a preferred embodiment, those genes identified during the cancer screen that are expressed in a significant amount in other tissues (e.g., essential organs) are removed from the profile, although in some embodiments, this is not necessary (e.g., where organs may be dispensible, e.g., female or male specific). That is, when screening for drugs, it is usually preferable that the target expression be disease specific, to minimize possible side effects on other organs were there expression.

15 In a preferred embodiment, cancer sequences are those that are up-regulated in cancer; that is, the expression of these genes is higher in the cancer tissue as compared to non-cancer or non-malignant tissue. "Up-regulation" as used herein often means at least about a two-fold change, preferably at least about a three fold change, with at least about five-fold or higher being preferred. Another embodiment is directed to sequences up-regulated in non-malignant conditions relative to normal. Uniformity among relevant samples is also preferred.

20 In a preferred embodiment, cancer sequences are those that are up-regulated in cancer; that is, the expression of these genes is higher in the cancer tissue as compared to non-cancer or non-malignant tissue. "Up-regulation" as used herein often means at least about a two-fold change, preferably at least about a three fold change, with at least about five-fold or higher being preferred. Another embodiment is directed to sequences up-regulated in non-malignant conditions relative to normal. Uniformity among relevant samples is also preferred.

25 Unigene cluster identification numbers and accession numbers herein are for the GenBank sequence database and the sequences of the accession numbers are hereby expressly incorporated by reference. GenBank is available, see, e.g., Benson, et al. (1998) Nuc. Acids Res. 26:1-7; and <http://www.ncbi.nlm.nih.gov/>. Sequences are also available in other databases, e.g., European Molecular Biology Laboratory (EMBL) and DNA Database of Japan (DDBJ).

30 In some situations, the sequences may be derived from assembly of available sequences or be predicted from genomic DNA using exon prediction algorithms, such as FGENESH. See



Salamov and Solovyev (2000) Genome Res. 10:516-522. In other situations, sequences have been derived from cloning and sequencing of isolated nucleic acids.

In another preferred embodiment, cancer sequences are those that are down-regulated in the cancer; that is, the expression of these genes is lower in cancer tissue as compared to non-cancerous tissue. "Down-regulation" as used herein often means at least about a two-fold change, preferably at least about a three fold change, with at least about five-fold or higher being preferred.

#### Informatics

The ability to identify genes that are over or under expressed in cancer can additionally provide high-resolution, high-sensitivity datasets which can be used in the areas of diagnostics, therapeutics, drug development, pharmacogenetics, protein structure, biosensor development, and other related areas. For example, the expression profiles can be used in diagnostic or prognostic evaluation of patients with cancer or related diseases. See Tables 1 and 3. Or as another example, subcellular toxicological information can be generated to better direct drug structure and activity correlation (see Anderson (June 11-12, 1998) Pharmaceutical Proteomics: Targets, Mechanism, and Function, paper presented at the IBC Proteomics conference, Coronado, CA). Subcellular toxicological information can also be utilized in a biological sensor device to predict the likely toxicological effect of chemical exposures and likely tolerable exposure thresholds (see U.S. Patent No. 5,811,231). Similar advantages accrue from datasets relevant to other biomolecules and bioactive agents (e.g., nucleic acids, saccharides, lipids, drugs, and the like).

Thus, in another embodiment, the present invention provides a database that includes at least one set of assay data. The data contained in the database is acquired, e.g., using array analysis either singly or in a library format. The database can be in a form in which data can be maintained and transmitted, but is preferably an electronic database. The electronic database of the invention can be maintained on any electronic device allowing for the storage of and access to the database, such as a personal computer, but is preferably distributed on a wide area network, such as the World Wide Web.

The focus of the present section on databases that include peptide sequence data is for clarity of illustration only. Similar databases can be assembled for assay data acquired using an assay of the invention.

The compositions and methods for identifying and/or quantitating the relative and/or absolute abundance of a variety of molecular and macromolecular species from a biological sample representing cancer, e.g., the identification of cancer-associated sequences described herein, provide an abundance of information which can be correlated with pathological conditions, predisposition to disease, drug testing, therapeutic monitoring, gene-disease causal linkages, identification of correlates of immunity and physiological status, among others. Although the data generated from the assays of the invention is suited for manual review and analysis, in a preferred embodiment, data processing using high-speed computers is utilized.

An array of methods for indexing and retrieving biomolecular information is available. For example, U.S. Patents 6,023,659 and 5,966,712 disclose a relational database system for storing biomolecular sequence information in a manner that allows sequences to be catalogued and searched according to one or more protein function hierarchies. U.S. Patent 5,953,727 discloses a relational database having sequence records containing information in a format that allows a collection of partial-length DNA sequences to be catalogued and searched according to association with one or more sequencing projects for obtaining full-length sequences from the collection of partial length sequences. U.S. Patent 5,706,498 discloses a gene database retrieval system for making a retrieval of a gene sequence similar to a sequence data item in a gene database based on the degree of similarity between a key sequence and a target sequence. U.S. Patent 5,538,897 discloses a method using mass spectroscopy fragmentation patterns of peptides to identify amino acid sequences in computer databases by comparison of predicted mass spectra with experimentally-derived mass spectra using a closeness-of-fit measure. U.S. Patent 5,926,818 discloses a multi-dimensional database comprising a functionality for multi-dimensional data analysis described as on-line analytical processing (OLAP), which entails the consolidation of projected and actual data according to more than one consolidation path or dimension. U.S. Patent 5,295,261 reports a hybrid database structure in which the fields of each database record are divided into two classes, navigational and informational data, with navigational fields stored in a hierarchical topological map which can be viewed as a tree structure or as the merger of two or more such tree structures. See also Baxevanis, et al. (2001) Bioinformatics: A Practical Guide to the Analysis of Genes and Proteins Wiley; Mount (2001) Bioinformatics: Sequence and Genome Analysis CSH Press, NY; Durbin, et al. (eds. 1999) Biological Sequence Analysis: Probabilistic Models of Proteins and Nucleic Acids Cambridge University Press; Baxevanis and Ouellette (eds. 1998) Bioinformatics: A Practical Guide to the

Analysis of Genes and Proteins (2d. ed.) Wiley-Liss; Rashidi and Buehler (1999)  
Bioinformatics: Basic Applications in Biological Science and Medicine CRC Press; Setubal, et  
al. (eds. 1997) Introduction to Computational Molecular Biology Brooks/Cole; Misener and  
Krawetz (eds. 2000) Bioinformatics: Methods and Protocols Humana Press; Higgins and Taylor  
5 (eds. 2000) Bioinformatics: Sequence, Structure, and Databanks: A Practical Approach Oxford  
University Press; Brown (2001) Bioinformatics: A Biologist's Guide to Biocomputing and the  
Internet Eaton Pub.; Han and Kamber (2000) Data Mining: Concepts and Techniques  
Kaufmann Pub.; and Waterman (1995) Introduction to Computational Biology: Maps,  
Sequences, and Genomes Chap and Hall.

10       The present invention provides a computer database comprising a computer and  
software for storing in computer-retrievable form assay data records cross-tabulated, e.g., with  
data specifying the source of the target-containing sample from which each sequence specificity  
record was obtained.

15       In an exemplary embodiment, at least one of the sources of target-containing sample is  
from a control tissue sample known to be free of pathological disorders. In a variation, at least  
one of the sources is a known pathological tissue specimen, e.g., a neoplastic lesion or another  
tissue specimen to be analyzed for cancer. In another variation, the assay records cross-tabulate  
one or more of the following parameters for each target species in a sample: (1) a unique  
identification code, which can include, e.g., a target molecular structure and/or characteristic  
20       separation coordinate (e.g., electrophoretic coordinates); (2) sample source; and (3) absolute  
and/or relative quantity of the target species present in the sample.

25       The invention also provides for the storage and retrieval of a collection of target data in  
a computer data storage apparatus, which can include magnetic disks, optical disks, magneto-  
optical disks, DRAM, SRAM, SGRAM, SDRAM, RDRAM, DDR RAM, magnetic bubble  
memory devices, and other data storage devices, including CPU registers and on-CPU data  
storage arrays. Typically, the target data records are stored as a bit pattern in an array of  
magnetic domains on a magnetizable medium or as an array of charge states or transistor gate  
states, such as an array of cells in a DRAM device (e.g., each cell comprised of a transistor and  
a charge storage area, which may be on the transistor). In one embodiment, the invention  
30       provides such storage devices, and computer systems built therewith, comprising a bit pattern  
encoding a protein expression fingerprint record comprising unique identifiers for at least 10  
target data records cross-tabulated with target source.

When the target is a peptide or nucleic acid, the invention preferably provides a method for identifying related peptide or nucleic acid sequences, comprising performing a computerized comparison between a peptide or nucleic acid sequence assay record stored in or retrieved from a computer storage device or database and at least one other sequence. The comparison can  
5 include a sequence analysis or comparison algorithm or computer program embodiment thereof (e.g., FASTA, TFASTA, GAP, BESTFIT) and/or the comparison may be of the relative amount of a peptide or nucleic acid sequence in a pool of sequences determined from a polypeptide or nucleic acid sample of a specimen.

The invention also preferably provides a magnetic disk, such as an IBM-compatible  
10 (DOS, Windows, Windows95/98/2000, Windows NT, OS/2) or other format (e.g., Linux, SunOS, Solaris, AIX, SCO Unix, VMS, MV, Macintosh, etc.) floppy diskette or hard (fixed, Winchester) disk drive, comprising a bit pattern encoding data from an assay of the invention in a file format suitable for retrieval and processing in a computerized sequence analysis, comparison, or relative quantitation method.

15 The invention also provides a network, comprising a plurality of computing devices linked via a data link, such as an Ethernet cable (coax or 10BaseT), telephone line, ISDN line, wireless network, optical fiber, or other suitable signal transmission medium, whereby at least one network device (e.g., computer, disk array, etc.) comprises a pattern of magnetic domains (e.g., magnetic disk) and/or charge domains (e.g., an array of DRAM cells) composing a bit  
20 pattern encoding data acquired from an assay of the invention.

The invention also provides a method for transmitting assay data that includes generating an electronic signal on an electronic communications device, such as a modem, ISDN terminal adapter, DSL, cable modem, ATM switch, or the like, wherein the signal includes (in native or encrypted format) a bit pattern encoding data from an assay or a database  
25 comprising a plurality of assay results obtained by the method of the invention.

In a preferred embodiment, the invention provides a computer system for comparing a query target to a database containing an array of data structures, such as an assay result obtained by the method of the invention, and ranking database targets based on the degree of identity and gap weight to the target data. A central processor is preferably initialized to load and execute  
30 the computer program for alignment and/or comparison of the assay results. Data for a query target is entered into the central processor via an I/O device. Execution of the computer

program results in the central processor retrieving the assay data from the data file, which comprises a binary description of an assay result.

The target data or record and the computer program can be transferred to secondary memory, which is typically random access memory (e.g., DRAM, SRAM, SGRAM, or SDRAM). Targets are ranked according to the degree of correspondence between a selected assay characteristic (e.g., binding to a selected affinity moiety) and the same characteristic of the query target and results are output via an I/O device. For example, a central processor can be a conventional computer (e.g., Intel Pentium, PowerPC, Alpha, PA-8000, SPARC, MIPS 4400, MIPS 10000, VAX, etc.); a program can be a commercial or public domain molecular biology software package (e.g., UWGCG Sequence Analysis Software, Darwin); a data file can be an optical or magnetic disk, a data server, a memory device (e.g., DRAM, SRAM, SGRAM, SDRAM, EPROM, bubble memory, flash memory, etc.); an I/O device can be a terminal comprising a video display and a keyboard, a modem, an ISDN terminal adapter, an Ethernet port, a punched card reader, a magnetic strip reader, or other suitable I/O device.

The invention also preferably provides the use of a computer system, such as that described above, which comprises: (1) a computer; (2) a stored bit pattern encoding a collection of peptide sequence specificity records obtained by the methods of the invention, which may be stored in the computer; (3) a comparison target, such as a query target; and (4) a program for alignment and comparison, typically with rank-ordering of comparison results on the basis of computed similarity values. See, e.g., Ewens and Grant (2001) Statistical Methods in Bioinformatics: An Introduction Springer-Verlag. Mathematical approaches can also be used to conclude whether similarities or differences in the gene expression exhibited by different samples are significant. See, e.g., Golub, et al. (1999) Science 286:531-537; Duda, et al. (2001) Pattern Classification Wiley; and Hastie, et al. (2001) The Elements of Statistical Learning: Data Mining, Inference, and Prediction Springer-Verlag. One approach to determine whether a sample is more similar to or has maximum similarity with a given condition between the sample and one or more pools representing different conditions for comparison; the pool with the smallest vector angle is then chosen as the most similar to the biological sample among the pools compared.

#### Characteristics of cancer-associated proteins

Cancer proteins of the present invention may be classified as secreted proteins, transmembrane proteins, or intracellular proteins. In one embodiment, the cancer protein is an

intracellular protein. Intracellular proteins may be found in the cytoplasm and/or in the nucleus. Intracellular proteins are involved in all aspects of cellular function and replication (including, e.g., signaling pathways); aberrant expression of such proteins often results in unregulated or dysregulated cellular processes (see, e.g., Alberts, et al. (eds. 1994) Molecular Biology of the  
5 Cell (3d ed.) Garland). For example, many intracellular proteins have enzymatic activity such as protein kinase activity, protein phosphatase activity, protease activity, nucleotide cyclase activity, polymerase activity, and the like. Intracellular proteins also serve as docking proteins that are involved in organizing complexes of proteins, or targeting proteins to various subcellular localizations, and are involved in maintaining the structural integrity of organelles.

10 An increasingly appreciated concept in characterizing proteins is the presence in the proteins of one or more structural motifs for which defined functions have been attributed. In addition to the highly conserved sequences found in the enzymatic domain of proteins, highly conserved sequences have been identified in proteins that are involved in protein-protein interaction. For example, Src-homology-2 (SH2) domains bind tyrosine-phosphorylated targets  
15 in a sequence dependent manner. PTB domains, which are distinct from SH2 domains, also bind tyrosine phosphorylated targets. SH3 domains bind to proline-rich targets. In addition, PH domains, tetratricopeptide repeats and WD domains to name only a few, have been shown to mediate protein-protein interactions. Some of these may also be involved in binding to phospholipids or other second messengers. These motifs can be identified on the basis of amino  
20 acid sequence; thus, an analysis of the sequence of proteins may provide insight into both the enzymatic potential of the molecule and/or molecules with which the protein may associate. One useful database is Pfam (protein families), which is a large collection of multiple sequence alignments and hidden Markov models covering many common protein domains. Versions are available via the internet from Washington University in St. Louis, the Sanger Center in  
25 England, and the Karolinska Institute in Sweden. See, e.g., Bateman, et al. (2000) Nuc. Acids Res. 28:263-266; Sonnhammer, et al. (1997) Proteins 28:405-420 ; Bateman, et al. (1999) Nuc. Acids Res. 27:260-262; and Sonnhammer, et al. (1998) Nuc. Acids Res. 26:320-322.

In another embodiment, the cancer sequences are transmembrane proteins. Transmembrane proteins are molecules that span a phospholipid bilayer of a cell. They may  
30 have an intracellular domain, an extracellular domain, or both. The intracellular domains of such proteins may have a number of functions including those already described for intracellular proteins. For example, the intracellular domain may have enzymatic activity

and/or may serve as a binding site for additional proteins. Frequently the intracellular domain of transmembrane proteins serves both roles. For example certain receptor tyrosine kinases have both protein kinase activity and SH2 domains. In addition, autophosphorylation of tyrosines on the receptor molecule itself, creates binding sites for additional SH2 domain  
5 containing proteins.

Transmembrane proteins may contain from one to many transmembrane domains. For example, receptor tyrosine kinases, certain cytokine receptors, receptor guanylyl cyclases and receptor serine/threonine protein kinases contain a single transmembrane domain. However, various other proteins including channels and adenylyl cyclases contain numerous  
10 transmembrane domains. Many important cell surface receptors such as G protein coupled receptors (GPCRs) are classified as "seven transmembrane domain" proteins, as they contain 7 membrane spanning regions. Characteristics of transmembrane domains include approximately 17 consecutive hydrophobic amino acids that may be followed by charged amino acids. Therefore, upon analysis of the amino acid sequence of a particular protein, the localization and  
15 number of transmembrane domains within the protein may be predicted (see, e.g., PSORT web site <http://psort.nibb.ac.jp/>). Important transmembrane protein receptors include, but are not limited to the insulin receptor, insulin-like growth factor receptor, human growth hormone receptor, glucose transporters, transferrin receptor, epidermal growth factor receptor, low density lipoprotein receptor, epidermal growth factor receptor, leptin receptor, and interleukin  
20 receptors, e.g., IL-1 receptor, IL-2 receptor, etc.

The extracellular domains of transmembrane proteins are diverse; however, conserved motifs are found repeatedly among various extracellular domains. Conserved structure and/or functions have been ascribed to different extracellular motifs. Many extracellular domains are involved in binding to other molecules. In one aspect, extracellular domains are found on  
25 receptors. Factors that bind the receptor domain include circulating ligands, which may be peptides, proteins, or small molecules such as adenosine and the like. For example, growth factors such as EGF, FGF, and PDGF are circulating growth factors that bind to their cognate receptors to initiate a variety of cellular responses. Other factors include cytokines, mitogenic factors, neurotrophic factors, and the like. Extracellular domains also bind to cell-associated  
30 molecules. In this respect, they may mediate cell-cell interactions. Cell-associated ligands can be tethered to the cell, e.g., via a glycosylphosphatidylinositol (GPI) anchor, or may themselves

be transmembrane proteins. Extracellular domains may also associate with the extracellular matrix and contribute to the maintenance of the cell structure.

Cancer proteins that are transmembrane are particularly preferred in the present invention as they are readily accessible targets for immunotherapeutics, as are described herein.

- 5 In addition, as outlined below, transmembrane proteins can be also useful in imaging modalities. Antibodies may be used to label such readily accessible proteins in situ. Alternatively, antibodies can also label intracellular proteins, in which case samples are typically permeablized to provide access to intracellular proteins. In addition, some membrane proteins can be processed to release a soluble protein, or to expose a residual fragment.
- 10 Released soluble proteins may be useful diagnostic markers, processed residual protein fragments may be useful lung markers of disease.

- It will also be appreciated that a transmembrane protein can be made soluble by removing transmembrane sequences, e.g., through recombinant methods. Furthermore, transmembrane proteins that have been made soluble can be made to be secreted through
- 15 recombinant means by adding an appropriate signal sequence.

- In another embodiment, the cancer proteins are secreted proteins; the secretion of which can be either constitutive or regulated. These proteins may have a signal peptide or signal sequence that targets the molecule to the secretory pathway. Secreted proteins are involved in numerous physiological events; e.g., if circulating, they often serve to transmit signals to
- 20 various other cell types. The secreted protein may function in an autocrine manner (acting on the cell that secreted the factor), a paracrine manner (acting on cells in close proximity to the cell that secreted the factor), an endocrine manner (acting on cells at a distance, e.g., secretion into the blood stream), or exocrine (secretion, e.g., through a duct or to adjacent epithelial surface as sweat glands, sebaceous glands, pancreatic ducts, lacrimal glands, mammary glands, wax producing glands of the ear, etc.). Thus secreted molecules often find use in modulating or
- 25 altering numerous aspects of physiology. Cancer proteins that are secreted proteins are particularly preferred in the present invention as they serve as good targets for diagnostic markers, e.g., for blood, plasma, serum, or stool tests. Those which are enzymes may be antibody or small molecule targets. Others may be useful as vaccine targets, e.g., via CTL
- 30 mechanisms.



#### Use of cancer nucleic acids

As described above, cancer sequence is initially identified by substantial nucleic acid and/or amino acid sequence homology or linkage to the cancer sequences outlined herein. Such homology can be based upon the overall nucleic acid or amino acid sequence, and is generally  
5 determined as outlined below, using either homology programs or hybridization conditions. Typically, linked sequences on a mRNA are found on the same molecule.

As detailed elsewhere, percent identity can be determined using an algorithm such as BLAST. A preferred method utilizes the BLASTN module of WU-BLAST-2 set to the default parameters, with overlap span and overlap fraction set to 1 and 0.125, respectively. Alignment  
10 may include the introduction of gaps in the sequences to be aligned. In addition, for sequences which contain either more or fewer nucleotides than those of the nucleic acids described, the percentage of homology may be determined based on the number of homologous nucleosides in relation to the total number of nucleosides. Thus, e.g., homology of sequences shorter than those of the sequences identified will be determined using the number of nucleosides in the  
15 shorter sequence.

In one embodiment, the nucleic acid homology is determined through hybridization studies. Thus, e.g., nucleic acids which hybridize under high stringency to a described nucleic acid, or its complement, or is also found on naturally occurring mRNAs is considered a cancer  
20 sequence. In another embodiment, less stringent hybridization conditions are used; e.g., moderate or low stringency conditions may be used; see Ausubel, supra, and Tijssen, supra.

The cancer nucleic acid sequences of the invention, e.g., the sequences in Tables 1-68, can be fragments of larger genes, e.g., they are nucleic acid segments. "Genes" in this context includes coding regions, non-coding regions, and mixtures of coding and non-coding regions. Accordingly, using the sequences provided herein, extended sequences, in either direction, of  
25 the cancer genes can be obtained, using techniques well known for cloning either longer sequences or the full length sequences; see Ausubel, et al., supra. Much can be done by informatics and many sequences can be clustered to include multiple sequences corresponding to a single gene, e.g., systems such as UniGene (see, <http://www.ncbi.nlm.nih.gov/UniGene/>).

Once a cancer nucleic acid is identified, it can be cloned and, if necessary, its constituent  
30 parts recombined to form the entire cancer nucleic acid coding regions or the entire mRNA sequence. Once isolated from its natural source, e.g., contained within a plasmid or other vector or excised therefrom as a linear nucleic acid segment, the recombinant cancer nucleic acid can

be further used as a probe to identify and isolate other cancer nucleic acids, e.g., extended coding regions. It can also be used as a "precursor" nucleic acid to make modified or variant cancer nucleic acids and proteins.

The cancer nucleic acids of the present invention are used in several ways. In one embodiment, nucleic acid probes to the cancer nucleic acids are made and attached to biochips to be used in screening and diagnostic methods, as outlined below, or for administration, e.g., for gene therapy, vaccine, RNAi, and/or antisense applications. Alternatively, cancer nucleic acids that include coding regions of cancer proteins can be put into expression vectors for the expression of cancer proteins, again for screening purposes or for administration to a patient.

In a preferred embodiment, nucleic acid probes to cancer nucleic acids (both the nucleic acid sequences outlined in the figures and/or the complements thereof) are made. The nucleic acid probes attached to the biochip are designed to be substantially complementary to the cancer nucleic acids, e.g., the target sequence (either the target sequence of the sample or to other probe sequences, e.g., in sandwich assays), such that hybridization of the target sequence and the probes of the present invention occurs. As outlined below, this complementarity need not be perfect; there may be any number of base pair mismatches which will interfere with hybridization between the target sequence and the single stranded nucleic acids of the present invention. However, if the number of mutations is so great that no hybridization can occur under even the least stringent of hybridization conditions, the sequence is not a complementary target sequence. Thus, by "substantially complementary" herein is meant that the probes are sufficiently complementary to the target sequences to hybridize under normal reaction conditions, particularly high stringency conditions, as outlined herein.

A nucleic acid probe is generally single stranded but can be partially single and partially double stranded. The strandedness of the probe is dictated by the structure, composition, and properties of the target sequence. In general, the nucleic acid probes range from about 8-100 bases long, with from about 10-80 bases being preferred, and from about 30-50 bases being particularly preferred. That is, generally whole genes are not used. In some embodiments, much longer nucleic acids can be used, up to hundreds of bases.

In a preferred embodiment, more than one probe per sequence is used, with either overlapping probes or probes to different sections of the target being used. That is, two, three, four or more probes, with three being preferred, are used to build in a redundancy for a

particular target. The probes can be overlapping (e.g., have some sequence in common), or separate. In some cases, PCR primers may be used to amplify signal for higher sensitivity.

Nucleic acids can be attached or immobilized to a solid support in a wide variety of ways. By "immobilized" and grammatical equivalents herein is meant the association or  
5 binding between the nucleic acid probe and the solid support is sufficient to be stable under the conditions of binding, washing, analysis, and removal as outlined. The binding can typically be covalent or non-covalent. By "non-covalent binding" and grammatical equivalents herein is meant one or more of electrostatic, hydrophilic, and hydrophobic interactions. Included in non-covalent binding is the covalent attachment of a molecule, e.g., streptavidin to the support and  
10 the non-covalent binding of the biotinylated probe to the streptavidin. By "covalent binding" and grammatical equivalents herein is meant that the two moieties, the solid support and the probe, are attached by at least one bond, including sigma bonds, pi bonds, and coordination bonds. Covalent bonds can be formed directly between the probe and the solid support or can be formed by a cross linker or by inclusion of a specific reactive group on either the solid  
15 support or the probe or both molecules. Immobilization may also involve a combination of covalent and non-covalent interactions.

In general, the probes are attached to the biochip in a wide variety of ways. As described herein, the nucleic acids can either be synthesized first, with subsequent attachment to the biochip, or can be directly synthesized on the biochip.

20 The biochip comprises a suitable solid substrate. By "substrate" or "solid support" or other grammatical equivalents herein is meant a material that can be modified for the attachment or association of the nucleic acid probes and is amenable to at least one detection method. Often, the substrate may contain discrete individual sites appropriate for individual partitioning and identification. The number of possible substrates is very large, and include, but  
25 are not limited to, glass and modified or functionalized glass, plastics (including acrylics, polystyrene and copolymers of styrene and other materials, polypropylene, polyethylene, polybutylene, polyurethanes, Teflon, etc.), polysaccharides, nylon or nitrocellulose, resins, silica or silica-based materials including silicon and modified silicon, carbon, metals, inorganic glasses, plastics, etc. In general, the substrates allow optical detection and do not appreciably  
30 fluoresce. See WO 0055627.

Generally the substrate is planar, although other configurations of substrates may be used as well. For example, the probes may be placed on the inside surface of a tube for flow-

through sample analysis to minimize sample volume. Similarly, the substrate may be flexible, such as a flexible foam, including closed cell foams made of particular plastics.

In a preferred embodiment, the surface of the biochip and the probe may be derivatized with chemical functional groups for subsequent attachment of the two. Thus, e.g., the biochip is  
5 derivatized with a chemical functional group including, but not limited to, amino groups, carboxy groups, oxo groups, and thiol groups, with amino groups being particularly preferred. Using these functional groups, the probes can be attached using functional groups on the probes. For example, nucleic acids containing amino groups can be attached to surfaces comprising amino groups, e.g., using linkers; e.g., homo-or hetero-bifunctional linkers as are well known  
10 (see 1994 Pierce Chemical Company catalog, technical section on cross-linkers, pages 155-200). In addition, in some cases, additional linkers, such as alkyl groups (including substituted and heteroalkyl groups) may be used.

In this embodiment, oligonucleotides are synthesized, and then attached to the surface of the solid support. Either the 5' or 3' terminus may be attached to the solid support, or  
15 attachment may be via linkage to an internal nucleoside. In another embodiment, the immobilization to the solid support may be very strong, yet non-covalent. For example, biotinylated oligonucleotides can be made, which bind to surfaces covalently coated with streptavidin, resulting in attachment.

Alternatively, the oligonucleotides may be synthesized on the surface. For example,  
20 photoactivation techniques utilizing photopolymerization compounds and techniques are used. In a preferred embodiment, the nucleic acids can be synthesized in situ, using known photolithographic techniques, such as those described in WO 95/25116; WO 95/35505; U.S. Patent Nos. 5,700,637 and 5,445,934; and references cited within, all of which are expressly incorporated by reference; these methods of attachment form the basis of the Affymetrix  
25 GeneChip™ technology.

Often, amplification-based assays are performed to measure the expression level of cancer-associated sequences. These assays are typically performed in conjunction with reverse transcription. In such assays, a cancer-associated nucleic acid sequence acts as a template in an amplification reaction (e.g., Polymerase Chain Reaction, or PCR). In a quantitative  
30 amplification, the amount of amplification product will be proportional to the amount of template in the original sample. Comparison to appropriate controls provides a measure of the amount of cancer-associated RNA. Methods of quantitative amplification are well known.

Detailed protocols for quantitative PCR are provided, e.g., in Innis, et al. (1990) PCR Protocols, A Guide to Methods and Applications Academic Press.

In some embodiments, a TaqMan based assay is used to measure expression. TaqMan based assays use a fluorogenic oligonucleotide probe that contains a 5' fluorescent dye and a 3' quenching agent. The probe hybridizes to a PCR product, but cannot itself be extended due to a blocking agent at the 3' end. When the PCR product is amplified in subsequent cycles, the 5' nuclease activity of the polymerase, e.g., AmpliTaq, results in the cleavage of the TaqMan probe. This cleavage separates the 5' fluorescent dye and the 3' quenching agent, thereby resulting in an increase in fluorescence as a function of amplification (see, e.g., literature provided by Perkin-Elmer, e.g., www2.perkin-elmer.com).

Other suitable amplification methods include, but are not limited to, ligase chain reaction (LCR) (see Wu and Wallace (1989) Genomics 4:560-569, Landegren, et al. (1988) Science 241:1077-1080, and Barringer, et al. (1990) Gene 89:117-122), transcription amplification (Kwoh, et al. (1989) Proc. Natl. Acad. Sci. USA 86:1173-1177), self-sustained sequence replication (Guatelli, et al. (1990) Proc. Nat. Acad. Sci. USA 87:1874-1878), dot PCR, linker adapter PCR, etc.

#### Expression of cancer proteins from nucleic acids

In a preferred embodiment, cancer nucleic acids, e.g., encoding cancer proteins, are used to make a variety of expression vectors to express cancer proteins which can then be used in screening assays, as described below. Expression vectors and recombinant DNA technology are well known (see, e.g., Ausubel, supra, and Fernandez and Hoeffler (eds. 1999) Gene Expression Systems Academic Press) to express proteins. The expression vectors may be either self-replicating extrachromosomal vectors or vectors which integrate into a host genome. Generally, these expression vectors include transcriptional and translational regulatory nucleic acid operably linked to the nucleic acid encoding the cancer protein. The term "control sequences" refers to DNA sequences used for the expression of an operably linked coding sequence in a particular host organism. Control sequences that are suitable for prokaryotes, e.g., include a promoter, optionally an operator sequence, and a ribosome binding site. Eukaryotic cells are known to utilize promoters, polyadenylation signals, and enhancers.

Nucleic acid is "operably linked" when it is placed into a functional relationship with another nucleic acid sequence. For example, DNA for a presequence or secretory leader is operably linked to DNA for a polypeptide if it is expressed as a preprotein that participates in

the secretion of the polypeptide; a promoter or enhancer is operably linked to a coding sequence if it affects the transcription of the sequence; or a ribosome binding site is operably linked to a coding sequence if it is positioned so as to facilitate translation. Generally, "operably linked" means that the DNA sequences being linked are contiguous, and, in the case of a secretory leader, contiguous and in reading phase. However, enhancers do not have to be contiguous. Linking is typically accomplished by ligation at convenient restriction sites. If such sites do not exist, synthetic oligonucleotide adaptors or linkers are used in accordance with conventional practice. Transcriptional and translational regulatory nucleic acid will generally be appropriate to the host cell used to express the cancer protein. Numerous types of appropriate expression vectors and suitable regulatory sequences are known for a variety of host cells.

In general, transcriptional and translational regulatory sequences may include, but are not limited to, promoter sequences, ribosomal binding sites, transcriptional start and stop sequences, translational start and stop sequences, and enhancer or activator sequences. In a preferred embodiment, the regulatory sequences include a promoter and transcriptional start and stop sequences.

Promoter sequences may be either constitutive or inducible promoters. The promoters may be either naturally occurring promoters or hybrid promoters. Hybrid promoters, which combine elements of more than one promoter, are also known, and are useful in the present invention.

An expression vector may comprise additional elements. For example, the expression vector may have two replication systems, thus allowing it to be maintained in two organisms, e.g., in mammalian or insect cells for expression and in a prokaryotic host for cloning and amplification. Furthermore, for integrating expression vectors, the expression vector often contains at least one sequence homologous to the host cell genome, and preferably two homologous sequences which flank the expression construct. The integrating vector may be directed to a specific locus in the host cell by selecting the appropriate homologous sequence for inclusion in the vector. Constructs for integrating vectors are available. See, e.g., Fernandez and Hoeffler, *supra*; and Kitamura, et al. (1995) Proc. Nat'l Acad. Sci. USA 92:9146-9150.

In addition, in a preferred embodiment, the expression vector contains a selectable marker gene to allow the selection of transformed host cells. Selection genes are well known and will vary with the host cell used.

The cancer proteins of the present invention are usually produced by culturing a host cell transformed with an expression vector containing nucleic acid encoding a cancer protein, under the appropriate conditions to induce or cause expression of the cancer protein. Conditions appropriate for cancer protein expression will vary with the choice of the expression vector and the host cell, and will be easily ascertained through routine experimentation or optimization. For example, the use of constitutive promoters in the expression vector will require optimizing the growth and proliferation of the host cell, while the use of an inducible promoter requires the appropriate growth conditions for induction. In addition, in some embodiments, the timing of the harvest is important. For example, the baculoviral systems used in insect cell expression are lytic viruses, and thus harvest time selection can be crucial for product yield.

Appropriate host cells include yeast, bacteria, archaeobacteria, fungi, and insect and animal cells, including mammalian cells. Of particular interest are *Saccharomyces cerevisiae* and other yeasts, *E. coli*, *Bacillus subtilis*, Sf9 cells, C129 cells, 293 cells, *Neurospora*, BHK, CHO, COS, HeLa cells, HUVEC (human umbilical vein endothelial cells), THP1 cells (a macrophage cell line), and various other human cells and cell lines.

In a preferred embodiment, the cancer proteins are expressed in mammalian cells. Mammalian expression systems may be used, and include retroviral and adenoviral systems. One expression vector system is a retroviral vector system such as is generally described in PCT/US97/01019 and PCT/US97/01048. Of particular use as mammalian promoters are the promoters from mammalian viral genes, since the viral genes are often highly expressed and have a broad host range. Examples include the SV40 early promoter, mouse mammary tumor virus LTR promoter, adenovirus major late promoter, herpes simplex virus promoter, and the CMV promoter (see, e.g., Fernandez and Hoeffler, *supra*). Typically, transcription termination and polyadenylation sequences recognized by mammalian cells are regulatory regions located 3' to the translation stop codon and thus, together with the promoter elements, flank the coding sequence. Examples of transcription terminator and polyadenylation signals include those derived from SV40.

Methods of introducing exogenous nucleic acid into mammalian hosts, as well as other hosts, are available, and will vary with the host cell used. Techniques include dextran-mediated transfection, calcium phosphate precipitation, polybrene mediated transfection, protoplast fusion, electroporation, viral infection, encapsulation of the polynucleotide(s) in liposomes, and direct microinjection of the DNA into nuclei.

In a preferred embodiment, cancer proteins are expressed in bacterial systems. Promoters from bacteriophage may also be used. In addition, synthetic promoters and hybrid promoters are also useful; e.g., the tac promoter is a hybrid of the trp and lac promoter sequences. Furthermore, a bacterial promoter can include naturally occurring promoters of non-bacterial origin that have the ability to bind bacterial RNA polymerase and initiate transcription. In addition to a functioning promoter sequence, an efficient ribosome binding site is desirable. The expression vector may also include a signal peptide sequence that provides for secretion of the cancer protein in bacteria. The protein is either secreted into the growth media (gram-positive bacteria) or into the periplasmic space, located between the inner and outer membrane of the cell (gram-negative bacteria). The bacterial expression vector may also include a selectable marker gene to allow for the selection of bacterial strains that have been transformed. Suitable selection genes include genes which render the bacteria resistant to drugs such as ampicillin, chloramphenicol, erythromycin, kanamycin, neomycin, and tetracycline. Selectable markers also include biosynthetic genes, such as those in the histidine, tryptophan, and leucine biosynthetic pathways. These components are assembled into expression vectors. Expression vectors for bacteria are well known, and include vectors for *Bacillus subtilis*, *E. coli*, *Streptococcus cremoris*, and *Streptococcus lividans*, among others (e.g., Fernandez and Hoeffler, supra). The bacterial expression vectors are transformed into bacterial host cells using techniques such as calcium chloride treatment, electroporation, and others.

In one embodiment, cancer proteins are produced in insect cells using, e.g., expression vectors for the transformation of insect cells, and in particular, baculovirus-based expression vectors.

In a preferred embodiment, a cancer protein is produced in yeast cells. Yeast expression systems are well known, and include expression vectors for *Saccharomyces cerevisiae*, *Candida albicans* and *C. maltosa*, *Hansenula polymorpha*, *Kluyveromyces fragilis* and *K. lactis*, *Pichia guillerimondii* and *P. pastoris*, *Schizosaccharomyces pombe*, and *Yarrowia lipolytica*.

The cancer protein may also be made as a fusion protein, using available techniques. Thus, e.g., for the creation of monoclonal antibodies, if the desired epitope is small, the cancer protein may be fused to a carrier protein to form an immunogen. Alternatively, the cancer protein may be made as a fusion protein to increase expression, or for other reasons. For example, when the cancer protein is a cancer peptide, the nucleic acid encoding the peptide may



be linked to other nucleic acid for expression purposes. Fusion with detection epitope tags can be made, e.g., with FLAG, His6, myc, HA, etc.

In a preferred embodiment, the cancer protein is purified or isolated after expression. Cancer proteins may be isolated or purified in a variety of ways depending on what other  
5 components are present in the sample and the requirements for purified product, e.g., natural conformation or denatured. Standard purification methods include ammonium sulfate precipitations, electrophoretic, molecular, immunological, and chromatographic techniques, including ion exchange, hydrophobic, affinity, and reverse-phase HPLC chromatography, and chromatofocusing. For example, the cancer protein may be purified using a standard anti-  
10 cancer protein antibody column. Ultrafiltration and diafiltration techniques, in conjunction with protein concentration, are also useful. See, e.g., Walsh (2002) Proteins: Biochemistry and Biotechnology Wiley; Hardin, et al. (eds. 2001) Cloning, Gene Expression and Protein Purification Oxford Univ. Press; Wilson, et al. (eds. 2000) Encyclopedia of Separation Science Academic Press; and Scopes (1993) Protein Purification Springer-Verlag. The degree of  
15 purification necessary will vary depending on the use of the cancer protein. In some instances no purification will be necessary.

Once expressed and purified if necessary, the cancer proteins and nucleic acids are useful in a number of applications. They may be used as immunoselection reagents, as vaccine reagents, as screening agents, therapeutic entities, for production of antibodies, as transcription  
20 or translation inhibitors, etc.

#### Variants of cancer proteins

Also included within one embodiment of cancer proteins are amino acid variants of the naturally occurring sequences, as determined herein. Preferably, the variants are preferably greater than about 75% homologous to the wild-type sequence, more preferably greater than  
25 about 80%, even more preferably greater than about 85%, and most preferably greater than 90%. In some embodiments the homology will be as high as about 93-95% or 98%. As for nucleic acids, homology in this context means sequence similarity or identity, with identity being preferred. This homology will be determined using standard techniques, as are outlined above for nucleic acid homologies.

30 Cancer proteins of the present invention may be shorter or longer than the wild type amino acid sequences. Thus, in a preferred embodiment, included within the definition of cancer proteins are portions or fragments of the wild type sequences herein. In addition, as

outlined above, the cancer nucleic acids of the invention may be used to obtain additional coding regions, and thus additional protein sequence.

In one embodiment, the cancer proteins are derivative or variant cancer proteins as compared to the wild-type sequence. That is, as outlined more fully below, the derivative cancer peptide will often contain at least one amino acid substitution, deletion, or insertion, with amino acid substitutions being particularly preferred. The amino acid substitution, insertion, or deletion may occur at many residue positions within the cancer peptide.

Also included within one embodiment of cancer proteins of the present invention are amino acid sequence variants. These variants typically fall into one or more of three classes: substitutional, insertional, or deletional variants. These variants ordinarily are prepared by site specific mutagenesis of nucleotides in the DNA encoding the cancer protein, using cassette or PCR mutagenesis or other techniques, to produce DNA encoding the variant, and thereafter expressing the DNA in recombinant cell culture as outlined above. However, variant cancer protein fragments having up to about 100-150 residues may be prepared by in vitro synthesis using established techniques. Amino acid sequence variants are characterized by the predetermined nature of the variation, a feature that sets them apart from naturally occurring allelic or interspecies variation of the cancer protein amino acid sequence. The variants typically exhibit a similar qualitative biological activity as a naturally occurring analogue, although variants can also be selected which have modified characteristics.

While the site or region for introducing an amino acid sequence variation is often predetermined, the mutation per se need not be predetermined. For example, in order to optimize the performance of a mutation at a given site, random mutagenesis may be conducted at the target codon or region and the expressed cancer variants screened for the optimal combination of desired activity. Techniques for making substitution mutations at predetermined sites in DNA having a known sequence are well known, e.g., M13 primer mutagenesis and PCR mutagenesis. Screening of mutants is often done using assays of cancer protein activities.

Amino acid substitutions are typically of single residues; insertions usually will be on the order of from about 1-20 amino acids, although considerably larger insertions may be tolerated. Deletions generally range from about 1-20 residues, although in some cases deletions may be much larger.

Substitutions, deletions, insertions, or combination thereof may be used to arrive at a final derivative. Generally these changes are done on a few amino acids to minimize the

alteration of the molecule. However, larger changes may be tolerated in certain circumstances. When small alterations in the characteristics of the cancer protein are desired, substitutions are generally made in accordance with the amino acid substitution relationships described.

5 The variants typically exhibit essentially the same qualitative biological activity and will elicit the same immune response as a naturally-occurring analog, although variants also are selected to modify the characteristics of cancer proteins as needed. Alternatively, the variant may be designed such that a biological activity of the cancer protein is altered. For example, glycosylation sites may be added, altered, or removed.

10 Substantial changes in function or immunological identity are sometimes made by selecting substitutions that are less conservative than those described above. For example, substitutions may be made which more significantly affect: the structure of the polypeptide backbone in the area of the alteration, for example the alpha-helical or beta-sheet structure; the charge or hydrophobicity of the molecule at the target site; or the bulk of the side chain. Substitutions which generally are expected to produce the greatest changes in the polypeptide's  
15 properties are those in which (a) a hydrophilic residue, e.g., serine or threonine is substituted for (or by) a hydrophobic residue, e.g., leucine, isoleucine, phenylalanine, valine, or alanine; (b) a cysteine or proline is substituted for (or by) another residue; (c) a residue having an electropositive side chain, e.g., lysine, arginine, or histidine, is substituted for (or by) an electronegative residue, e.g., glutamic or aspartic acid; (d) a residue having a bulky side chain,  
20 e.g., phenylalanine, is substituted for (or by) one not having a side chain, e.g., glycine; or (e) a proline residue is incorporated or substituted, which changes the degree of rotational freedom of the peptidyl bond.

25 Variants typically exhibit a similar qualitative biological activity and will elicit the same immune response as the naturally-occurring analog, although variants also are selected to modify the characteristics of the skin cancer proteins as needed. Alternatively, the variant may be designed such that the biological activity of the cancer protein is altered. For example, glycosylation sites may be altered or removed.

30 Covalent modifications of cancer polypeptides are included within the scope of this invention. One type of covalent modification includes reacting targeted amino acid residues of a cancer polypeptide with an organic derivatizing agent that is capable of reacting with selected side chains or the N-or C-terminal residues of a cancer polypeptide. Derivatization with bifunctional agents is useful, for instance, for crosslinking cancer polypeptides to a water-

insoluble support matrix or surface for use in a method for purifying anti-cancer polypeptide antibodies or screening assays, as is more fully described below. Commonly used crosslinking agents include, e.g., 1,1-bis(diazoacetyl)-2-phenylethane, glutaraldehyde, N-hydroxysuccinimide esters, e.g., esters with 4-azidosalicylic acid, homobifunctional  
5 imidoesters, including disuccinimidyl esters such as 3,3'-dithiobis(succinimidylpropionate), bifunctional maleimides such as bis-N-maleimido-1,8-octane and agents such as methyl-3-((p-azidophenyl)dithio)propioimide.

Other modifications include deamidation of glutamyl and asparaginyl residues to the corresponding glutamyl and aspartyl residues, respectively, hydroxylation of proline and lysine,  
10 phosphorylation of hydroxyl groups of serinyl, threonyl, or tyrosyl residues, methylation of the amino groups of the lysine, arginine, and histidine side chains (e.g., pp. 79-86, Creighton (1992) Proteins: Structure and Molecular Properties Freeman), acetylation of the N-terminal amine, and amidation of a C-terminal carboxyl group.

Another type of covalent modification of the cancer polypeptide included within the  
15 scope of this invention comprises altering the native glycosylation pattern of the polypeptide. "Altering the native glycosylation pattern" is intended for purposes herein to mean deleting one or more carbohydrate moieties found in native sequence cancer polypeptide, and/or adding one or more glycosylation sites that are not present in the native sequence cancer polypeptide. Glycosylation patterns can be altered in many ways. Different cell types to express cancer-associated sequences can result in different glycosylation patterns.  
20

Addition of glycosylation sites to cancer polypeptides may also be accomplished by altering the amino acid sequence thereof. The alteration may be made, e.g., by the addition of, or substitution by, one or more serine or threonine residues to the native sequence cancer polypeptide (for O-linked glycosylation sites). The cancer amino acid sequence may optionally  
25 be altered through changes at the DNA level, particularly by mutating the DNA encoding the cancer polypeptide at preselected bases such that codons are generated that will translate into the desired amino acids.

Another means of increasing the number of carbohydrate moieties on the cancer polypeptide is by chemical or enzymatic coupling of glycosides to the polypeptide. See, e.g.,  
30 WO 87/05330; pp. 259-306 in Aplin and Wriston (1981) CRC Crit. Rev. Biochem.

Removal of carbohydrate moieties present on the cancer polypeptide may be accomplished chemically or enzymatically or by mutational substitution of codons encoding for

amino acid residues that serve as targets for glycosylation. Chemical deglycosylation techniques are applicable. See, e.g., Sojar and Bahl (1987) Arch. Biochem. Biophys. 259:52-57 and Edge, et al. (1981) Anal. Biochem. 118:131-137. Enzymatic cleavage of carbohydrate moieties on polypeptides can be achieved by the use of a variety of endo-and exo-glycosidases. See, e.g., Thotakura, et al. (1987) Meth. Enzymol. 138:350-359.

Another type of covalent modification of cancer comprises linking the cancer polypeptide to one of a variety of nonproteinaceous polymers, e.g., polyethylene glycol, polypropylene glycol, or polyoxyalkylenes, in the manner set forth in U.S. Patent Nos. 4,640,835; 4,496,689; 4,301,144; 4,670,417; 4,791,192, or 4,179,337.

Cancer polypeptides of the present invention may also be modified in a way to form chimeric molecules comprising a cancer polypeptide fused to another heterologous polypeptide or amino acid sequence. In one embodiment, such a chimeric molecule comprises a fusion of a cancer polypeptide with a tag polypeptide which provides an epitope to which an anti-tag antibody can selectively bind. The epitope tag is generally placed at the amino-or carboxyl-terminus of the cancer polypeptide. The presence of such epitope-tagged forms of a cancer polypeptide can be detected using an antibody against the tag polypeptide. Also, provision of the epitope tag enables the cancer polypeptide to be readily purified by affinity purification using an anti-tag antibody or another type of affinity matrix that binds to the epitope tag. In an alternative embodiment, the chimeric molecule may comprise a fusion of a cancer polypeptide with an immunoglobulin or a particular region of an immunoglobulin. For a bivalent form of the chimeric molecule, such a fusion could be to the Fc region of an IgG molecule.

Various tag polypeptides and their respective antibodies are available. Examples include poly-histidine (poly-his) or poly-histidine-glycine (poly-his-gly) tags; HIS6 and metal chelation tags, the flu HA tag polypeptide and its antibody 12CA5 (Field, et al. (1988) Mol. Cell. Biol. 8:2159-2165); the c-myc tag and the 8F9, 3C7, 6E10, G4, B7, and 9E10 antibodies thereto (Evan, et al. (1985) Molecular and Cellular Biology 5:3610-3616); and the Herpes Simplex virus glycoprotein D (gD) tag and its antibody (Paborsky, et al. (1990) Protein Engineering 3(6):547-553). Other tag polypeptides include the Flag-peptide (Hopp, et al. (1988) BioTechnology 6:1204-1210); the KT3 epitope peptide (Martin, et al. (1992) Science 255:192-194); tubulin epitope peptide (Skinner, et al. (1991) J. Biol. Chem. 266:15163-15166); and the T7 gene 10 protein peptide tag (Lutz-Freyermuth, et al. (1990) Proc. Natl. Acad. Sci. USA 87:6393-6397).

Also included are other cancer proteins of the cancer family, and cancer proteins from other organisms, which are cloned and expressed as outlined below. Thus, probe or degenerate polymerase chain reaction (PCR) primer sequences may be used to find other related cancer proteins from humans or other organisms. Particularly useful probe and/or PCR primer  
5 sequences include the unique areas of the cancer nucleic acid sequence. Preferred PCR primers are from about 15-35 nucleotides in length, with from about 20-30 being preferred, and may contain inosine as needed. The conditions for PCR reaction have been well described (e.g., Innis, PCR Protocols, supra).

In addition, cancer proteins can be made that are longer than those encoded by the  
10 nucleic acids of the Tables, e.g., by the elucidation of extended sequences, the addition of epitope or purification tags, the addition of other fusion sequences, etc.

Cancer proteins may also be identified as being encoded by cancer nucleic acids. Thus, cancer proteins are encoded by nucleic acids that will hybridize to the sequences of the sequence listings, or their complements, as outlined herein.

#### 15 Antibodies to cancer proteins

In a preferred embodiment, when the cancer protein is to be used to generate antibodies, e.g., for immunotherapy or immunodiagnosis, the cancer protein should share at least one epitope or determinant with the full length protein. By "epitope" or "determinant" herein is typically meant a portion of a protein which will generate and/or bind an antibody or T-cell  
20 receptor in the context of MHC. Thus, in most instances, antibodies made to a smaller cancer protein will be able to bind to the full-length protein, particularly linear epitopes. In a preferred embodiment, the epitope is unique; that is, antibodies generated to a unique epitope show little or no cross-reactivity. In a preferred embodiment, the epitope is selected from a protein sequence set out in the tables.

25 Methods of preparing polyclonal antibodies exist (e.g., Coligan, supra; and Harlow and Lane, supra). Polyclonal antibodies can be raised in a mammal, e.g., by one or more injections of an immunizing agent and, if desired, an adjuvant. Typically, the immunizing agent and/or adjuvant will be injected in the mammal by multiple subcutaneous or intraperitoneal injections. The immunizing agent may include a protein encoded by a nucleic acid of Tables 1-68 or  
30 fragment thereof or a fusion protein thereof. It may be useful to conjugate the immunizing agent to a protein known to be immunogenic in the mammal being immunized. Examples of such immunogenic proteins include but are not limited to keyhole limpet hemocyanin, serum

albumin, bovine thyroglobulin, and soybean trypsin inhibitor. Examples of adjuvants which may be employed include Freund's complete adjuvant and MPL-TDM adjuvant (monophosphoryl Lipid A, synthetic trehalose dicorynomycolate). Various immunization protocols may be used.

- 5           The antibodies may, alternatively, be monoclonal antibodies. Monoclonal antibodies may be prepared using hybridoma methods, such as those described by Kohler and Milstein (1975) Nature 256:495. In a hybridoma method, a mouse, hamster, or other appropriate host animal, is typically immunized with an immunizing agent to elicit lymphocytes that produce or are capable of producing antibodies that will specifically bind to the immunizing agent.
- 10          Alternatively, the lymphocytes may be immunized in vitro. The immunizing agent will typically include a polypeptide encoded by a nucleic acid of the tables or fragment thereof, or a fusion protein thereof. Generally, either peripheral blood lymphocytes ("PBLs") are used if cells of human origin are desired, or spleen cells or lymph node cells are used if non-human mammalian sources are desired. The lymphocytes are then fused with an immortalized cell line
- 15          using a suitable fusing agent, such as polyethylene glycol, to form a hybridoma cell (e.g., pp. 59-103 in Goding (1986) Monoclonal Antibodies: Principles and Practice Academic Press). Immortalized cell lines are usually transformed mammalian cells, particularly myeloma cells of rodent, bovine, or human origin. Usually, rat or mouse myeloma cell lines are employed. The hybridoma cells may be cultured in a suitable culture medium that preferably contains one or
- 20          more substances that inhibit the growth or survival of the unfused, immortalized cells. For example, if the parental cells lack the enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine ("HAT medium"), which substances prevent the growth of HGPRT-deficient cells.
- 25          In one embodiment, the antibodies are bispecific antibodies. Bispecific antibodies are monoclonal, preferably human or humanized, antibodies that have binding specificities for at least two different antigens or that have binding specificities for two epitopes on the same antigen. In one embodiment, one of the binding specificities is for a protein encoded by a nucleic acid of the tables or a fragment thereof, the other one is for another antigen, and
- 30          preferably for a cell-surface protein or receptor or receptor subunit, preferably one that is tumor specific. Alternatively, tetramer-type technology may create multivalent reagents.

In a preferred embodiment, the antibodies to cancer protein are capable of reducing or eliminating a biological function of a cancer protein, in a naked form or conjugated to an effector moiety, as is described below. That is, the addition of anti-cancer protein antibodies (either polyclonal or preferably monoclonal) to cancer tissue (or cells containing cancer) may  
5 reduce or eliminate the cancer. Generally, at least a 25% decrease in activity, growth, size, or the like is preferred, with at least about 50% being particularly preferred and about a 95-100% decrease being especially preferred.

In a preferred embodiment the antibodies to the cancer proteins are humanized antibodies (e.g., Xenerex Biosciences, Medarex, Inc., Abgenix, Inc., Protein Design Labs, Inc.)  
10 Humanized forms of non-human (e.g., murine) antibodies are chimeric molecules of immunoglobulins, immunoglobulin chains or fragments thereof (such as Fv, Fab, Fab', F(ab')<sub>2</sub> or other antigen-binding subsequences of antibodies) which contain minimal sequence derived from non-human immunoglobulin. Humanized antibodies include human immunoglobulins (recipient antibody) in which residues from a complementary determining region (CDR) of the  
15 recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat, or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of a human immunoglobulin are replaced by corresponding non-human residues. Humanized antibodies may also comprise residues which are found neither in the recipient antibody nor in the imported CDR or framework sequences. In general, a humanized  
20 antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin consensus sequence. The humanized antibody optimally also will typically comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human  
25 immunoglobulin (Jones, et al. (1986) Nature 321:522-525; Riechmann, et al. (1988) Nature 332:323-329; and Presta (1992) Curr. Op. Struct. Biol. 2:593-596). Humanization can be essentially performed following the method of Winter and co-workers (Jones, et al. (1986) Nature 321:522-525; Riechmann, et al. (1988) Nature 332:323-327; Verhoeyen, et al. (1988) Science 239:1534-1536), by substituting rodent CDRs or CDR sequences for corresponding  
30 sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies (U.S. Patent No. 4,816,567), wherein substantially less than an intact human variable domain has been substituted by corresponding sequence from a non-human species.



Human antibodies can also be produced using phage display libraries (Hoogenboom and Winter (1992) J. Mol. Biol. 227:381-388; Marks, et al. (1991) J. Mol. Biol. 222:581-597) or human monoclonal antibodies (e.g., p. 77, Cole, et al. in Reisfeld and Sell (1985) Monoclonal Antibodies and Cancer Therapy Liss; and Boerner, et al. (1991) J. Immunol. 147:86-95).

- 5 Similarly, human antibodies can be made by introducing human immunoglobulin loci into transgenic animals, e.g., mice in which the endogenous immunoglobulin genes have been partially or completely inactivated. Upon challenge, human antibody production is observed, which closely resembles that seen in humans in nearly all respects, including gene rearrangement, assembly, and antibody repertoire. This approach is described, e.g., in U.S. Patent Nos. 5,545,807; 5,545,806; 5,569,825; 5,625,126; 5,633,425; 5,661,016, and in the following scientific publications: Marks, et al. (1992) Bio/Technology 10:779-783; Lonberg, et al. (1994) Nature 368:856-859; Morrison (1994) Nature 368:812-13; Fishwild, et al. (1996) Nature Biotechnology 14:845-851; Neuberger (1996) Nature Biotechnology 14:826; and Lonberg and Huszar (1995) Intern. Rev. Immunol. 13:65-93.

- 15 By immunotherapy is meant treatment of cancer with an antibody raised against cancer proteins. As used herein, immunotherapy can be passive or active. Passive immunotherapy as defined herein is the passive transfer of antibody to a recipient (patient). Active immunization is the induction of antibody and/or T-cell responses in a recipient (patient). Induction of an immune response is the result of providing the recipient with an antigen to which antibodies are raised. The antigen may be provided by injecting a polypeptide against which antibodies are desired to be raised into a recipient, or contacting the recipient with a nucleic acid capable of expressing the antigen and under conditions for expression of the antigen, leading to an immune response.

- 25 In a preferred embodiment the cancer proteins against which antibodies are raised are secreted proteins as described above. Without being bound by theory, antibodies used for treatment may bind and prevent the secreted protein from binding to its receptor, thereby inactivating the secreted cancer protein, e.g., in autocrine signaling.

- 30 In another preferred embodiment, the cancer protein to which antibodies are raised is a transmembrane protein. Without being bound by theory, antibodies used for treatment may bind the extracellular domain of the cancer protein and prevent it from binding to other proteins, such as circulating ligands or cell-associated molecules. The antibody may cause down-regulation of the transmembrane cancer protein. The antibody may be a competitive, non-

competitive or uncompetitive inhibitor of protein binding to the extracellular domain of the cancer protein. The antibody may also be an antagonist of the cancer protein. Further, the antibody may prevent activation of the transmembrane cancer protein, or may induce or suppress a particular cellular pathway. In one aspect, when the antibody prevents the binding of  
5 other molecules to the cancer protein, the antibody prevents growth of the cell. The antibody may also be used to target or sensitize the cell to cytotoxic agents, including, but not limited to TNF- $\alpha$ , TNF- $\beta$ , IL-1, INF- $\gamma$ , and IL-2, or chemotherapeutic agents including 5FU, vinblastine, actinomycin D, cisplatin, methotrexate, and the like. In some instances the antibody may belong to a sub-type that activates serum complement when complexed with the transmembrane  
10 protein thereby mediating cytotoxicity or antigen-dependent cytotoxicity (ADCC). Thus, cancer may be treated by administering to a patient antibodies directed against the transmembrane cancer protein. Antibody-labeling may activate a co-toxin, localize a toxin payload, or otherwise provide means to locally ablate cells.

In another preferred embodiment, the antibody is conjugated to an effector moiety. The  
15 effector moiety can be various molecules, including labeling moieties such as radioactive labels or fluorescent labels, or can be a therapeutic moiety. In one aspect the therapeutic moiety is a small molecule that modulates the activity of a cancer protein. In another aspect the therapeutic moiety may modulate the activity of molecules associated with or in close proximity to a cancer protein. The therapeutic moiety may inhibit enzymatic or signaling activity such as protease or  
20 collagenase or protein kinase activity associated with cancer, or be an attractant of other cells, such as NK cells.

In a preferred embodiment, the therapeutic moiety can also be a cytotoxic agent. In this method, targeting the cytotoxic agent to cancer tissue or cells results in a reduction in the number of afflicted cells, thereby reducing symptoms associated with cancer. Cytotoxic agents  
25 are numerous and varied and include, but are not limited to, cytotoxic drugs or toxins or active fragments of such toxins. Suitable toxins and their corresponding fragments include diphtheria A chain, exotoxin A chain, ricin A chain, abrin A chain, curcin, croton, phenomycin, enomycin, saporin, auristatin, and the like. Cytotoxic agents also include radiochemicals made by conjugating radioisotopes to antibodies raised against cancer proteins, or binding of a  
30 radionuclide to a chelating agent that has been covalently attached to the antibody. Targeting the therapeutic moiety to transmembrane cancer proteins not only serves to increase the local

concentration of therapeutic moiety in the cancer afflicted area, but also serves to reduce deleterious side effects that may be associated with the untargeted therapeutic moiety.

In another preferred embodiment, the cancer protein against which the antibodies are raised is an intracellular protein. In this case, the antibody may be conjugated to a protein  
5 which facilitates entry into the cell. In one case, the antibody enters the cell by endocytosis. In another embodiment, a nucleic acid encoding the antibody is administered to the individual or cell. Moreover, wherein the cancer protein can be targeted within a cell, e.g., the nucleus, an antibody thereto may contain a signal for that target localization, e.g., a nuclear localization signal.

10 The cancer antibodies of the invention specifically bind to cancer proteins. By "specifically bind" herein is meant that the antibodies bind to the protein with a  $K_d$  of at least about 0.1 mM, more usually at least about 1  $\mu$ M, preferably at least about 0.1  $\mu$ M or better, and most preferably, 0.01  $\mu$ M or better. Selectivity of binding to the specific target and not to related sequences is often also important.

15 Detection of cancer sequence for diagnostic and therapeutic applications

In one aspect, the RNA expression levels of genes are determined for different cellular states in the cancer phenotype. Expression levels of genes in normal tissue (e.g., not undergoing cancer) and in cancer tissue (and in some cases, for varying severities of cancer that relate to prognosis, as outlined below), or in non-malignant disease are evaluated to provide  
20 expression profiles. A gene expression profile of a particular cell state or point of development is essentially a "fingerprint" of the state of the cell. While two states may have a particular gene similarly expressed, the evaluation of a number of genes simultaneously allows the generation of a gene expression profile that is reflective of the state of the cell. By comparing expression profiles of cells in different states, information regarding which genes are important (including  
25 both up- and down-regulation of genes) in each of these states is obtained. Then, diagnosis may be performed or confirmed to determine whether a tissue sample has the gene expression profile of normal or cancerous tissue. This will provide for molecular diagnosis of related conditions.

"Differential expression," or grammatical equivalents as used herein, refers to qualitative or quantitative differences in the temporal and/or cellular gene expression patterns within and  
30 among cells and tissue. Thus, a differentially expressed gene can qualitatively have its expression altered, including an activation or inactivation, in, e.g., normal versus cancer tissue. Genes may be turned on or turned off in a particular state, relative to another state thus

permitting comparison of two or more states. A qualitatively regulated gene will exhibit an expression pattern within a state or cell type which is detectable by standard techniques. Some genes will be expressed in one state or cell type, but not in both. Alternatively, the difference in expression may be quantitative, e.g., in that expression is increased or decreased; e.g., gene expression is either upregulated, resulting in an increased amount of transcript, or downregulated, resulting in a decreased amount of transcript. The degree to which expression differs need only be large enough to quantify via standard characterization techniques as outlined below, such as by use of Affymetrix GeneChip™ expression arrays. See, Lockhart (1996) Nature Biotechnology 14:1675-1680. Other techniques include, but are not limited to, quantitative reverse transcriptase PCR, northern analysis, and RNase protection. As outlined above, preferably the change in expression (e.g., upregulation or downregulation) is at least about 50%, more preferably at least about 100%, more preferably at least about 150%, more preferably at least about 200%, with from 300 to at least 1000% being especially preferred.

Evaluation may be at the gene transcript or the protein level. The amount of gene expression may be monitored using nucleic acid probes to the RNA or DNA equivalent of the gene transcript, and the quantification of gene expression levels, or, alternatively, the final gene product itself (protein) can be monitored, e.g., with antibodies to the cancer protein and standard immunoassays (ELISAs, etc.) or other techniques, including mass spectroscopy assays, 2D gel electrophoresis assays, etc. Proteins corresponding to cancer genes, e.g., those identified as being important in a cancer or disease phenotype, can be evaluated in a cancer diagnostic test. In a preferred embodiment, gene expression monitoring is performed simultaneously on a number of genes. Multiple protein expression monitoring can be performed as well.

In this embodiment, the cancer nucleic acid probes are attached to biochips as outlined herein for the detection and quantification of cancer sequences in a particular cell. The assays are further described below in the example. PCR techniques can be used to provide greater sensitivity.

In a preferred embodiment nucleic acids encoding the cancer protein are detected. Although DNA or RNA encoding the cancer protein may be detected, of particular interest are methods wherein an mRNA encoding a cancer protein is detected. Probes to detect mRNA can be a nucleotide/deoxynucleotide probe that is complementary to and hybridizes with the mRNA and includes, but is not limited to, oligonucleotides, cDNA, or RNA. Probes also should contain a detectable label, as defined herein. In one method the mRNA is detected after

immobilizing the nucleic acid to be examined on a solid support such as nylon membranes and hybridizing the probe with the sample. Following washing to remove the non-specifically bound probe, the label is detected. In another method, detection of the mRNA is performed in situ. In this method permeabilized cells or tissue samples are contacted with a detectably  
5 labeled nucleic acid probe for sufficient time to allow the probe to hybridize with the target mRNA. Following washing to remove the non-specifically bound probe, the label is detected. For example a digoxigenin labeled riboprobe (RNA probe) that is complementary to the mRNA encoding a cancer protein is detected by binding the digoxigenin with an anti-digoxigenin secondary antibody and developed with nitro blue tetrazolium and 5-bromo-4-chloro-3-indoyl  
10 phosphate.

In a preferred embodiment, various proteins from the three classes of proteins as described herein (secreted, transmembrane, or intracellular proteins) are used in diagnostic assays. The cancer proteins, antibodies, nucleic acids, modified proteins, and cells containing cancer sequences are used in diagnostic assays. This can be performed on an individual gene or  
15 corresponding polypeptide level. In a preferred embodiment, the expression profiles are used, preferably in conjunction with high throughput screening techniques to allow monitoring for expression profile genes and/or corresponding polypeptides.

As described and defined herein, cancer proteins, including intracellular, transmembrane, or secreted proteins, find use as markers of cancer, e.g., for prognostic or  
20 diagnostic purposes. Detection of these proteins in putative cancer tissue allows for detection, prognosis, or diagnosis of cancer or similar disease, and for selection of therapeutic strategy. In one embodiment, antibodies are used to detect cancer proteins. A preferred method separates proteins from a sample by electrophoresis on a gel (typically a denaturing and reducing protein gel, but may be another type of gel, including isoelectric focusing gels and the like). Following  
25 separation of proteins, the cancer protein is detected, e.g., by immunoblotting with antibodies raised against the cancer protein.

In another preferred method, antibodies to the cancer protein find use in in situ imaging techniques, e.g., in histology. See, e.g., Asai, et al. (eds. 1993) Methods in Cell Biology: Antibodies in Cell Biology (vol. 37) Academic Press. In this method, cells are contacted with  
30 from one to many antibodies to the cancer protein(s). Following washing to remove non-specific antibody binding, the presence of the antibody or antibodies is detected. In one embodiment the antibody is detected by incubating with a secondary antibody that contains a

detectable label. In another method the primary antibody to the cancer protein(s) contains a detectable label, e.g., an enzyme marker that can act on a substrate. In another preferred embodiment each one of multiple primary antibodies contains a distinct and detectable label. This method finds particular use in simultaneous screening for a plurality of cancer proteins.

5 Many other histological imaging techniques are also provided by the invention.

In a preferred embodiment the label is detected in a fluorometer which has the ability to detect and distinguish emissions of different wavelengths. In addition, a fluorescence activated cell sorter (FACS) can be used in the method.

10 In another preferred embodiment, antibodies find use in diagnosing cancer from blood, serum, plasma, stool, and other samples. Such samples, therefore, are useful as samples to be probed or tested for the presence of cancer proteins. Antibodies can be used to detect a cancer protein by previously described immunoassay techniques including ELISA, immunoblotting (western blotting), immunoprecipitation, BIACORE technology and the like. Conversely, the presence of antibodies may indicate an immune response against an endogenous cancer protein.

15 In a preferred embodiment, in situ hybridization of labeled cancer nucleic acid probes to tissue arrays is done. For example, arrays of tissue samples, including cancer tissue and/or normal tissue, are made. In situ hybridization (see, e.g., Ausubel, supra) is then performed. When comparing the fingerprints between an individual and a standard, a diagnosis, a prognosis, or a prediction may be based on the findings. It is further understood that the genes  
20 which indicate the diagnosis may differ from those which indicate the prognosis and molecular profiling of the condition of the cells may lead to distinctions between responsive or refractory conditions or may be predictive of outcomes.

In a preferred embodiment, the cancer proteins, antibodies, nucleic acids, modified proteins, and cells containing cancer sequences are used in prognosis assays. As above, gene  
25 expression profiles can be generated that correlate to cancer, clinical, pathological, or other information, in terms of long term prognosis. Again, this may be done on either a protein or gene level, with the use of genes being preferred. Single or multiple genes may be useful in various combinations. As above, cancer probes may be attached to biochips for the detection and quantification of cancer sequences in a tissue or patient. The assays proceed as outlined  
30 above for diagnosis. PCR method may provide more sensitive and accurate quantification.

### Assays for therapeutic compounds

- In a preferred embodiment, the proteins, nucleic acids, and antibodies as described herein are used in drug screening assays. The cancer proteins, antibodies, nucleic acids, modified proteins, and cells containing cancer sequences are used in drug screening assays or by evaluating the effect of drug candidates on a "gene expression profile" or expression profile of polypeptides. In a preferred embodiment, the expression profiles are used, preferably in conjunction with high throughput screening techniques, to allow monitoring for expression profile genes after treatment with a candidate agent (e.g., Zlokarnik, et al. (1998) Science 279:84-88; Heid (1996) Genome Res. 6:986-994.
- 10 In a preferred embodiment, the cancer proteins, antibodies, nucleic acids, modified proteins and cells containing the native or modified cancer proteins are used in screening assays. That is, the present invention provides novel methods for screening for compositions which modulate the cancer phenotype or an identified physiological function of a cancer protein. As above, this can be done on an individual gene level or by evaluating the effect of
- 15 drug candidates on a "gene expression profile". In a preferred embodiment, the expression profiles are used, preferably in conjunction with high throughput screening techniques, to allow monitoring for expression profile genes after treatment with a candidate agent, see Zlokarnik, supra.
- 20 Having identified the differentially expressed genes herein, a variety of assays may be performed. In a preferred embodiment, assays may be run on an individual gene or protein level. That is, having identified a particular gene as up regulated in cancer, test compounds can be screened for the ability to modulate gene expression or for binding to the cancer protein. "Modulation" thus includes both an increase and a decrease in gene expression. The preferred amount of modulation will depend on the original change of the gene expression in normal
- 25 versus tissue undergoing cancer, with changes of at least 10%, preferably 50%, more preferably 100-300%, and in some embodiments 300-1000% or greater. Thus, if a gene exhibits a 4-fold increase in cancer tissue compared to normal tissue, a decrease of about four-fold is often desired; similarly, a 10-fold decrease in cancer tissue compared to normal tissue often provides a target value of a 10-fold increase in expression to be induced by the test compound.
- 30 The amount of gene expression may be monitored using nucleic acid probes and the quantification of gene expression levels, or, alternatively, the gene product itself can be

monitored, e.g., through the use of antibodies to the cancer protein and standard immunoassays. Proteomics and separation techniques may also allow quantification of expression.

In a preferred embodiment, gene expression or protein monitoring of a number of entities, e.g., an expression profile, is monitored simultaneously. Such profiles will typically involve a plurality of those entities described herein.

In this embodiment, the cancer nucleic acid probes are attached to biochips as outlined herein for the detection and quantification of cancer sequences in a particular cell.

Alternatively, PCR may be used. Thus, a series, e.g., of microtiter plate, may be used with dispensed primers in desired wells. A PCR reaction can then be performed and analyzed for each well.

#### Modulators of cancer

Expression monitoring can be performed to identify compounds that modify the expression of one or more cancer-associated sequences, e.g., a polynucleotide sequence set out in the tables. Generally, in a preferred embodiment, a test modulator is added to the cells prior to analysis. Moreover, screens are also provided to identify agents that modulate cancer, modulate cancer proteins, bind to a cancer protein, or interfere with the binding of a cancer protein and an antibody or other binding partner.

The term "test compound" or "drug candidate" or "modulator" or grammatical equivalents as used herein describes a molecule, e.g., protein, oligopeptide, small organic molecule, polysaccharide, polynucleotide, etc., to be tested for the capacity to directly or indirectly alter the cancer phenotype or the expression of a cancer sequence, e.g., a nucleic acid or protein sequence. In preferred embodiments, modulators alter expression profiles, or expression profile nucleic acids or proteins provided herein. In one embodiment, the modulator suppresses a cancer phenotype, e.g., to a normal or non-malignant tissue fingerprint. In another embodiment, a modulator induced a cancer phenotype. Generally, a plurality of assay mixtures are run in parallel with different agent concentrations to obtain a differential response to the various concentrations. Typically, one of these concentrations serves as a negative control, e.g., at zero concentration or below the level of detection.

Drug candidates encompass numerous chemical classes, though typically they are organic molecules, preferably small organic compounds having a molecular weight of more than 100 and less than about 2,500 daltons. Preferred small molecules are less than 2000, or



less than 1500, or less than 1000, or less than 500 D. Candidate agents comprise functional groups necessary for structural interaction with proteins, particularly hydrogen bonding, and typically include at least an amine, carbonyl, hydroxyl or carboxyl group, preferably at least two of the functional chemical groups. The candidate agents often comprise cyclical carbon or  
5 heterocyclic structures and/or aromatic or polyaromatic structures substituted with one or more of the above functional groups. Candidate agents are also found among biomolecules including peptides, saccharides, fatty acids, steroids, purines, pyrimidines, derivatives, structural analogs, or combinations thereof. Particularly preferred are peptides.

In one aspect, a modulator will neutralize the effect of a cancer protein. By "neutralize"  
10 is meant that activity of a protein is inhibited or blocked and the consequent effect on the cell.

In certain embodiments, combinatorial libraries of potential modulators will be screened for an ability to bind to a cancer polypeptide or to modulate activity. Conventionally, new chemical entities with useful properties are generated by identifying a chemical compound (called a "lead compound") with some desirable property or activity, e.g., inhibiting activity,  
15 creating variants of the lead compound, and evaluating the property and activity of those variant compounds. Often, high throughput screening (HTS) methods are employed for such an analysis. See, e.g., Janzen (2002) High Throughput Screening: Methods and Protocols Humana; Devlin (ed. 1997) High Throughput Screening: The Discovery of Bioactive Substances Dekker; and Mei and Czarnik (eds. 2002) Integrated Drug Discovery Techniques  
20 Dekker.

In one preferred embodiment, high throughput screening methods involve providing a library containing a large number of potential therapeutic compounds (candidate compounds). Such "combinatorial chemical libraries" are then screened in one or more assays to identify those library members (particular chemical species or subclasses) that display a desired  
25 characteristic activity. The compounds thus identified can serve as conventional "lead compounds" or can themselves be used as potential or actual therapeutics.

A combinatorial chemical library is a collection of diverse chemical compounds generated by either chemical synthesis or biological synthesis by combining a number of chemical "building blocks" such as reagents. For example, a linear combinatorial chemical  
30 library, such as a polypeptide (e.g., mutein) library, is formed by combining a set of chemical building blocks called amino acids in every possible way for a given compound length (e.g., the number of amino acids in a polypeptide compound). Millions of chemical compounds can be

synthesized through such combinatorial mixing of chemical building blocks (Gallop, et al. (1994) J. Med. Chem. 37:1233-1251).

Preparation and screening of combinatorial chemical libraries is well known. Such combinatorial chemical libraries include, but are not limited to, peptide libraries (see, e.g., U.S. Patent No. 5,010,175, Furka (1991) Pept. Prot. Res. 37:487-493, Houghton, et al. (1991) Nature 354:84-88), peptoids (PCT Publication No WO 91/19735), encoded peptides (PCT Publication WO 93/20242), random bio-oligomers (PCT Publication WO 92/00091), benzodiazepines (U.S. Pat. No. 5,288,514), diversomers such as hydantoins, benzodiazepines and dipeptides (Hobbs, et al. (1993) Proc. Nat. Acad. Sci. USA 90:6909-6913, vinylogous polypeptides (Hagihara, et al. (1992) J. Amer. Chem. Soc. 114:6568-570), nonpeptidal peptidomimetics with a Beta-D-Glucose scaffolding (Hirschmann, et al. (1992) J. Amer. Chem. Soc. 114:9217-9218), analogous organic syntheses of small compound libraries (Chen, et al. (1994) J. Amer. Chem. Soc. 116:2661-662), oligocarbamates (Cho, et al. (1993) Science 261:1303-1305), and/or peptidyl phosphonates (Campbell, et al. (1994) J. Org. Chem. 59:658-xxx). See, generally, Gordon, et al. (1994) J. Med. Chem. 37:1385-1401, nucleic acid libraries (see, e.g., Stratagene, Corp.), peptide nucleic acid libraries (see, e.g., U.S. Patent 5,539,083), antibody libraries (see, e.g., Vaughn, et al. (1996) Nature Biotechnology 14(3):309-314, and PCT/US96/10287), carbohydrate libraries (see, e.g., Liang, et al. (1996) Science 274:1520-1522, and U.S. Patent No. 5,593,853), and small organic molecule libraries (see, e.g., benzodiazepines, page 33 Baum (Jan 18, 1993) C&EN; isoprenoids, U.S. Patent No. 5,569,588; thiazolidinones and metathiazanones, U.S. Patent No. 5,549,974; pyrrolidines, U.S. Patent Nos. 5,525,735 and 5,519,134; morpholino compounds, U.S. Patent No. 5,506,337; benzodiazepines, U.S. Patent No. 5,288,514; and the like).

Devices for the preparation of combinatorial libraries are commercially available (see, e.g., 357 MPS, 390 MPS, Advanced Chem Tech, Louisville KY, Symphony, Rainin, Woburn, MA, 433A Applied Biosystems, Foster City, CA, 9050 Plus, Millipore, Bedford, MA).

A number of well known robotic systems have also been developed for solution phase chemistries. These systems include automated workstations like the automated synthesis apparatus developed by Takeda Chemical Industries, LTD. (Osaka, Japan) and many robotic systems utilizing robotic arms (Zymate II, Zymark Corporation, Hopkinton, Mass.; Orca, Hewlett-Packard, Palo Alto, Calif.), which mimic the manual synthetic operations performed by a chemist. The above devices are suitable for use with the present invention. The nature and

implementation of modifications to these devices (if any) so that they can operate as discussed herein will be apparent. In addition, numerous combinatorial libraries are themselves commercially available (see, e.g., ComGenex, Princeton, N.J., Asinex, Moscow, Ru, Tripos, Inc., St. Louis, MO, ChemStar, Ltd, Moscow, RU, 3D Pharmaceuticals, Exton, PA, Martek  
5 Biosciences, Columbia, MD, etc.).

The assays to identify modulators are amenable to high throughput screening. Preferred assays thus detect enhancement or inhibition of cancer gene transcription, inhibition, or enhancement of polypeptide expression, and inhibition or enhancement of polypeptide activity.

High throughput assays for the presence, absence, quantification, or other properties of  
10 particular nucleic acids or protein products are well known. Similarly, binding assays and reporter gene assays are similarly well known. Thus, e.g., U.S. Patent No. 5,559,410 discloses high throughput screening methods for proteins, U.S. Patent No. 5,585,639 discloses high throughput screening methods for nucleic acid binding (e.g., in arrays), while U.S. Patent Nos. 5,576,220 and 5,541,061 disclose high throughput methods of screening for ligand/antibody  
15 binding.

In addition, high throughput screening systems are commercially available (see, e.g., Zymark Corp., Hopkinton, MA; Air Technical Industries, Mentor, OH; Beckman Instruments, Inc. Fullerton, CA; Precision Systems, Inc., Natick, MA, etc.). These systems typically automate entire procedures, including sample and reagent pipetting, liquid dispensing, timed  
20 incubations, and final readings of the microplate in detector(s) appropriate for the assay. These configurable systems provide high throughput and rapid start up as well as a high degree of flexibility and customization. The manufacturers of such systems provide detailed protocols for various high throughput systems. Thus, e.g., Zymark Corp. provides technical bulletins . describing screening systems for detecting the modulation of gene transcription, ligand binding,  
25 and the like.

In one embodiment, modulators are proteins, often naturally occurring proteins or fragments of naturally occurring proteins. Thus, e.g., cellular extracts containing proteins, or random or directed digests of proteinaceous cellular extracts, may be used. In this way libraries of proteins may be made for screening in the methods of the invention. Particularly preferred in  
30 this embodiment are libraries of bacterial, fungal, viral, and mammalian proteins, with the latter being preferred, and human proteins being especially preferred. Particularly useful test

compound will be directed to the class of proteins to which the target belongs, e.g., substrates for enzymes or ligands and receptors.

In a preferred embodiment, modulators are peptides of from about 5-30 amino acids, with from about 5-20 amino acids being preferred, and from about 7-15 being particularly preferred. The peptides may be digests of naturally occurring proteins, random peptides, or "biased" random peptides. By "randomized" or grammatical equivalents herein is meant that each nucleic acid and peptide consists of essentially random nucleotides and amino acids, respectively. Since generally these random peptides (or nucleic acids, discussed below) are chemically synthesized, they may incorporate a nucleotide or amino acid at any position. The synthetic process can be designed to generate randomized proteins or nucleic acids, to allow the formation of all or most of the possible combinations over the length of the sequence, thus forming a library of randomized candidate bioactive proteinaceous agents.

In one embodiment, the library is fully randomized, with no sequence preferences or constants at any position. In a preferred embodiment, the library is biased. That is, some positions within the sequence are either held constant, or are selected from a limited number of possibilities. For example, in a preferred embodiment, the nucleotides or amino acid residues are randomized within a defined class, e.g., of hydrophobic amino acids, hydrophilic residues, sterically biased (either small or large) residues, towards the creation of nucleic acid binding domains, the creation of cysteines, for cross-linking, prolines for SH-3 domains, serines, threonines, tyrosines, or histidines for phosphorylation sites, etc., or to purines, etc.

Modulators of cancer can also be nucleic acids, as defined above.

As described above generally for proteins, nucleic acid modulating agents may be naturally occurring nucleic acids, random nucleic acids, or "biased" random nucleic acids. For example, digests of prokaryotic or eukaryotic genomes may be used as is outlined above for proteins.

In a preferred embodiment, the candidate compounds are organic chemical moieties, a wide variety of which are available in the literature.

After the candidate agent has been added and the cells allowed to incubate for some period of time, the sample containing a target sequence to be analyzed is added to the biochip. If required, the target sequence is prepared using known techniques. For example, the sample may be treated to lyse the cells, using known lysis buffers, electroporation, etc., with purification and/or amplification such as PCR performed as appropriate. For example, an in

vitro transcription with labels covalently attached to the nucleotides is performed. Generally, the nucleic acids are labeled with biotin-FITC or PE, or with cy3 or cy5.

In a preferred embodiment, the target sequence is labeled with, e.g., a fluorescent, a chemiluminescent, a chemical, or a radioactive signal, to provide a means of detecting the target sequence's specific binding to a probe. The label also can be an enzyme, such as, alkaline  
5 phosphatase or horseradish peroxidase, which when provided with an appropriate substrate produces a product that can be detected. Alternatively, the label can be a labeled compound or small molecule, such as an enzyme inhibitor, that binds but is not catalyzed or altered by the enzyme. The label also can be a moiety or compound, such as, an epitope tag or biotin which  
10 specifically binds to streptavidin. For the example of biotin, the streptavidin is labeled as described above, thereby, providing a detectable signal for the bound target sequence. Unbound labeled streptavidin is typically removed prior to analysis.

These assays can be direct hybridization assays or can comprise "sandwich assays", which include the use of multiple probes, as is generally outlined in U.S. Patent Nos. 5,681,702,  
15 5,597,909, 5,545,730, 5,594,117, 5,591,584, 5,571,670, 5,580,731, 5,571,670, 5,591,584, 5,624,802, 5,635,352, 5,594,118, 5,359,100, 5,124,246, and 5,681,697, all of which are hereby incorporated by reference. In this embodiment, in general, the target nucleic acid is prepared as outlined above, and then added to the biochip comprising a plurality of nucleic acid probes, under conditions that allow the formation of a hybridization complex.

A variety of hybridization conditions may be used in the present invention, including high, moderate, and low stringency conditions as outlined above. The assays are generally run under stringency conditions which allows formation of the label probe hybridization complex only in the presence of target. Stringency can be controlled by altering a step parameter that is a thermodynamic variable, including, but not limited to, temperature, formamide concentration,  
25 salt concentration, chaotropic salt concentration, pH, organic solvent concentration, etc.

These parameters may also be used to control non-specific binding, as is generally outlined in U.S. Patent No. 5,681,697. Thus it may be desirable to perform certain steps at higher stringency conditions to reduce non-specific binding.

The reactions outlined herein may be accomplished in a variety of ways. Components  
30 of the reaction may be added simultaneously, or sequentially, in different orders, with preferred embodiments outlined below. In addition, the reaction may include a variety of other reagents. These include salts, buffers, neutral proteins, e.g., albumin, detergents, etc. which may be used

to facilitate optimal hybridization and detection, and/or reduce non-specific or background interactions. Reagents that otherwise improve the efficiency of the assay, such as protease inhibitors, nuclease inhibitors, anti-microbial agents, etc., may also be used as appropriate, depending on the sample preparation methods and purity of the target.

5       The assay data are analyzed to determine the expression levels, and changes in expression levels as between states of individual genes, forming a gene expression profile.

      Screens are performed to identify modulators of the cancer phenotype. In one embodiment, screening is performed to identify modulators that can induce or suppress a particular expression profile, thus preferably generating the associated phenotype. In another  
10   embodiment, e.g., for diagnostic applications, having identified differentially expressed genes important in a particular state, screens can be performed to identify modulators that alter expression of individual genes. In an another embodiment, screening is performed to identify modulators that alter a biological function of the expression product of a differentially expressed gene. Again, having identified the importance of a gene in a particular state, screens  
15   are performed to identify agents that bind and/or modulate the biological activity of the gene product.

      In addition, screens can be done for genes that are induced in response to a candidate agent or treatment process. After identifying a modulator based upon its ability to suppress a cancer expression pattern leading to a normal expression pattern (or its converse), or to  
20   modulate a single cancer gene expression profile so as to mimic the expression of the gene from normal tissue, a screen as described above can be performed to identify genes that are specifically modulated in response to the agent. Comparing expression profiles between normal tissue and agent treated cancer tissue reveals genes that are not expressed in normal tissue or cancer tissue, but are expressed in agent treated tissue. These agent-specific sequences can be  
25   identified and used by methods described herein for cancer genes or proteins. In particular, these sequences and the proteins they encode find use in marking or identifying agent treated cells. In addition, antibodies can be raised against the agent induced proteins and used to target novel therapeutics to the treated cancer tissue sample.

      Thus, in one embodiment, a test compound is administered to a population of cancer  
30   cells that have an associated cancer expression profile. By "administration" or "contacting" herein is meant that the candidate agent is added to the cells in such a manner as to allow the agent to act upon the cell, whether by uptake and intracellular action, or by action at the cell

surface. In some embodiments, nucleic acid encoding a proteinaceous candidate agent (e.g., a peptide) may be put into a viral construct such as an adenoviral or retroviral construct, and added to the cell, such that expression of the peptide agent is accomplished, e.g., PCT US97/01019. Regulatable gene therapy systems can also be used.

5        Once a test compound has been administered to the cells, the cells can be washed if desired and are allowed to incubate under preferably physiological conditions for some period of time. The cells are then harvested and a new gene expression profile is generated, as outlined herein.

10        Thus, e.g., cancer or non-malignant tissue may be screened for agents that modulate, e.g., induce or suppress a cancer phenotype. A change in at least one gene, preferably many, of the expression profile indicates that the agent has an effect on cancer activity. By defining such a signature for the cancer phenotype, screens for new drugs that alter the phenotype can be devised. With this approach, the drug target need not be known and need not be represented in the original expression screening platform, nor does the level of transcript for the target protein  
15        need to change.

      In a preferred embodiment, as outlined above, screens may be done on individual genes and gene products (proteins). That is, having identified a particular differentially expressed gene as important in a particular state, screening of modulators of either the expression of the gene or the gene product itself can be done. The gene products of differentially expressed genes  
20        are sometimes referred to herein as "cancer proteins" or a "cancer modulatory protein". The cancer modulatory protein may be a fragment, or alternatively, be the full length protein to the fragment encoded by the nucleic acids of the Tables. Preferably, the cancer modulatory protein is a fragment. In a preferred embodiment, the cancer amino acid sequence which is used to determine sequence identity or similarity is encoded by a nucleic acid of the Tables. In another  
25        embodiment, the sequences are naturally occurring allelic variants of a protein encoded by a nucleic acid of the Tables. In another embodiment, the sequences are sequence variants as further described herein.

      Preferably, the cancer modulatory protein is a fragment of about 14-24 amino acids long. More preferably the fragment is a soluble fragment. Preferably, the fragment includes a  
30        non-transmembrane region. In a preferred embodiment, the fragment has an N-terminal Cys to aid in solubility. In one embodiment, the C-terminus of the fragment is kept as a free acid and the N-terminus is a free amine to aid in coupling, e.g., to cysteine.

In one embodiment the cancer proteins are conjugated to an immunogenic agent as discussed herein. In one embodiment the cancer protein is conjugated to BSA.

Measurements of cancer polypeptide activity, or of cancer or the cancer phenotype can be performed using a variety of assays. For example, the effects of the test compounds upon the function of the cancer polypeptides can be measured by examining parameters described above. A suitable physiological change that affects activity can be used to assess the influence of a test compound on the polypeptides of this invention. When the functional consequences are determined using intact cells or animals, one can also measure a variety of effects such as, in the case of cancer associated with tumors, tumor growth, tumor metastasis, neovascularization, hormone release, transcriptional changes to both known and uncharacterized genetic markers (e.g., northern blots), changes in cell metabolism such as cell growth or pH changes, and changes in intracellular second messengers such as cGMP. In the assays of the invention, mammalian cancer polypeptide is typically used, e.g., mouse, preferably human.

Assays to identify compounds with modulating activity can be performed in vitro. For example, a cancer polypeptide is first contacted with a potential modulator and incubated for a suitable amount of time, e.g., from 0.5-48 hours. In one embodiment, the cancer polypeptide levels are determined in vitro by measuring the level of protein or mRNA. The level of protein is typically measured using immunoassays such as western blotting, ELISA, and the like with an antibody that selectively binds to the cancer polypeptide or a fragment thereof. For measurement of mRNA, amplification, e.g., using PCR, LCR, or hybridization assays, e.g., northern hybridization, RNase protection, dot blotting, are preferred. The level of protein or mRNA is typically detected using directly or indirectly labeled detection agents, e.g., fluorescently or radioactively labeled nucleic acids, radioactively or enzymatically labeled antibodies, and the like, as described herein.

Alternatively, a reporter gene system can be devised using a cancer protein promoter operably linked to a reporter gene such as luciferase, green fluorescent protein, CAT, or  $\beta$ -gal. The reporter construct is typically transfected into a cell. After treatment with a potential modulator, the amount of reporter gene transcription, translation, or activity is measured according to standard techniques.

In a preferred embodiment, as outlined above, screens may be done on individual genes and gene products (proteins). That is, having identified a particular differentially expressed gene as important in a particular state, screening of modulators of the expression of the gene or



the gene product itself can be done. The gene products of differentially expressed genes are sometimes referred to herein as "cancer proteins." The cancer protein may be a fragment, or alternatively, the full length protein to a fragment shown herein.

5 In one embodiment, screening for modulators of expression of specific genes is performed. Typically, the expression of only one or a few genes are evaluated. In another embodiment, screens are designed to first find compounds that bind to differentially expressed proteins. These compounds are then evaluated for the ability to modulate differentially expressed activity. Moreover, once initial candidate compounds are identified, variants can be further screened to better evaluate structure activity relationships.

10 In a preferred embodiment, binding assays are done. In general, purified or isolated gene product is used; that is, the gene products of one or more differentially expressed nucleic acids are made. For example, antibodies are generated to the protein gene products, and standard immunoassays are run to determine the amount of protein present. Alternatively, cells comprising the cancer proteins can be used in the assays.

15 Thus, in a preferred embodiment, the methods comprise combining a cancer protein and a candidate compound, and determining the binding of the compound to the cancer protein. Preferred embodiments utilize the human cancer protein, although other mammalian proteins may also be used, e.g., for the development of animal models of human disease. In some embodiments, as outlined herein, variant or derivative cancer proteins may be used.

20 Generally, in a preferred embodiment of the methods herein, the cancer protein or the candidate agent is non-diffusably bound to an insoluble support, preferably having isolated sample receiving areas (e.g., a microtiter plate, an array, etc.). The insoluble supports may be made of a composition to which the compositions can be bound, is readily separated from soluble material, and is otherwise compatible with the overall method of screening. The surface  
25 of such supports may be solid or porous and of a convenient shape. Examples of suitable insoluble supports include microtiter plates, arrays, membranes, and beads. These are typically made of glass, plastic (e.g., polystyrene), polysaccharides, nylon or nitrocellulose, teflon™, etc. Microtiter plates and arrays are especially convenient because a large number of assays can be carried out simultaneously, using small amounts of reagents and samples. The particular  
30 manner of binding of the composition is typically not crucial so long as it is compatible with the reagents and overall methods of the invention, maintains the activity of the composition, and is nondiffusable. Preferred methods of binding include the use of antibodies (which do not

sterically block either the ligand binding site or activation sequence when the protein is bound to the support), direct binding to "sticky" or ionic supports, chemical crosslinking, the synthesis of the protein or agent on the surface, etc. Following binding of the protein or agent, excess unbound material is removed by washing. The sample receiving areas may then be blocked  
5 through incubation with bovine serum albumin (BSA), casein, or other innocuous protein or other moiety.

In a preferred embodiment, the cancer protein is bound to the support, and a test compound is added to the assay. Alternatively, the candidate agent is bound to the support and the cancer protein is added. Novel binding agents include specific antibodies, non-natural  
10 binding agents identified in screens of chemical libraries, peptide analogs, etc. Of particular interest are screening assays for agents that have a low toxicity for human cells. A wide variety of assays may be used for this purpose, including labeled in vitro protein-protein binding assays, electrophoretic mobility shift assays, immunoassays for protein binding, functional assays (phosphorylation assays, etc.), and the like.

15 The determination of the binding of the test modulating compound to the cancer protein may be done in a number of ways. In a preferred embodiment, the compound is labeled, and binding determined directly, e.g., by attaching all or a portion of the cancer protein to a solid support, adding a labeled candidate agent (e.g., a fluorescent label), washing off excess reagent, and determining whether the label is present on the solid support. Various blocking and  
20 washing steps may be utilized as appropriate.

In some embodiments, only one of the components is labeled, e.g., the proteins (or proteinaceous candidate compounds) can be labeled. Alternatively, more than one component can be labeled with different labels, e.g.,  $^{125}\text{I}$  for the proteins and a fluorophor for the compound. Proximity reagents, e.g., quenching or energy transfer reagents are also useful.

25 In one embodiment, the binding of the test compound is determined by competitive binding assay. The competitor may be a binding moiety known to bind to the target molecule (e.g., a cancer protein), such as an antibody, peptide, binding partner, ligand, etc. Under certain circumstances, there may be competitive binding between the compound and the binding moiety, with the binding moiety displacing the compound. In one embodiment, the test  
30 compound is labeled. Either the compound, or the competitor, or both, is added first to the protein for a time sufficient to allow binding, if present. Incubations may be performed at a temperature which facilitates optimal activity, typically between about 4-40° C. Incubation

periods are typically optimized, e.g., to facilitate rapid high throughput screening. Typically between 0.1-1 hour will be sufficient. Excess reagent is generally removed or washed away. The second component is then added, and the presence or absence of the labeled component is followed, to indicate binding.

- 5           In a preferred embodiment, the competitor is added first, followed by a test compound. Displacement of the competitor is an indication that the test compound is binding to the cancer protein and thus is capable of binding to, and potentially modulating, the activity of the cancer protein. In this embodiment, either component can be labeled. Thus, e.g., if the competitor is labeled, the presence of label in the wash solution indicates displacement by the agent.
- 10          Alternatively, if the test compound is labeled, the presence of the label on the support indicates displacement.

- In an alternative embodiment, the test compound is added first, with incubation and washing, followed by the competitor. The absence of binding by the competitor may indicate that the test compound is bound to the cancer protein with a higher affinity. Thus, if the test
- 15          compound is labeled, the presence of the label on the support, coupled with a lack of competitor binding, may indicate that the test compound is capable of binding to the cancer protein.

- In a preferred embodiment, the methods comprise differential screening to identity agents that are capable of modulating the activity of the cancer proteins. In one embodiment, the methods comprise combining a cancer protein and a competitor in a first sample. A second
- 20          sample comprises a test compound, a cancer protein, and a competitor. The binding of the competitor is determined for both samples, and a change, or difference in binding between the two samples indicates the presence of an agent capable of binding to the cancer protein and potentially modulating its activity. That is, if the binding of the competitor is different in the second sample relative to the first sample, the agent is capable of binding to the cancer protein.

- 25          Alternatively, differential screening is used to identify drug candidates that bind to the native cancer protein, but cannot bind to modified cancer proteins. The structure of the cancer protein may be modeled, and used in rational drug design to synthesize agents that interact with that site. Drug candidates that affect the activity of a cancer protein are also identified by screening drugs for the ability to either enhance or reduce the activity of the protein.

- 30          Positive controls and negative controls may be used in the assays. Preferably control and test samples are performed in at least triplicate to obtain statistically significant results. Incubation of all samples is for a time sufficient for the binding of the agent to the protein.

Following incubation, samples are washed free of non-specifically bound material and the amount of bound, generally labeled agent determined. For example, where a radiolabel is employed, the samples may be counted in a scintillation counter to determine the amount of bound compound.

5           A variety of other reagents may be included in the screening assays. These include reagents like salts, neutral proteins, e.g., albumin, detergents, etc., which may be used to facilitate optimal protein-protein binding and/or reduce non-specific or background interactions. Also reagents that otherwise improve the efficiency of the assay, such as protease inhibitors, nuclease inhibitors, anti-microbial agents, etc., may be used. The mixture of components may  
10 be added in an order that provides for the requisite binding.

          In a preferred embodiment, the invention provides methods for screening for a compound capable of modulating the activity of a cancer protein. The methods comprise adding a test compound, as defined above, to a cell comprising cancer proteins. Preferred cell types include almost any cell. The cells contain a recombinant nucleic acid that encodes a  
15 cancer protein. In a preferred embodiment, a library of candidate agents are tested on a plurality of cells.

          In one aspect, the assays are evaluated in the presence or absence or previous or subsequent exposure of physiological signals, e.g., hormones, antibodies, peptides, antigens, cytokines, growth factors, action potentials, pharmacological agents including  
20 chemotherapeutics, radiation, carcinogenics, or other cells (e.g., cell-cell contacts). In another example, the determinations are determined at different stages of the cell cycle process.

          In this way, compounds that modulate cancer agents are identified. Compounds with pharmacological activity are able to enhance or interfere with the activity of the cancer protein. Once identified, similar structures are evaluated to identify critical structural feature of the  
25 compound.

          In one embodiment, a method of inhibiting cancer cell division is provided. The method comprises administration of a cancer inhibitor. In another embodiment, a method of inhibiting cancer is provided. The method may comprise administration of a cancer inhibitor. In a further embodiment, methods of treating cells or individuals with cancer are provided, e.g., comprising  
30 administration of a cancer inhibitor.

          In one embodiment, a cancer inhibitor is an antibody as discussed above. In another embodiment, the cancer inhibitor is an antisense molecule.

A variety of cell growth, proliferation, viability, and metastasis assays are available, as described below.

#### Soft agar growth or colony formation in suspension

Normal cells require a solid substrate to attach and grow. When the cells are transformed, they lose this phenotype and grow detached from the substrate. For example, transformed cells can grow in stirred suspension culture or suspended in semi-solid media, such as semi-solid or soft agar. The transformed cells, when transfected with tumor suppressor genes, regenerate normal phenotype and require a solid substrate to attach and grow. Soft agar growth or colony formation in suspension assays can be used to identify modulators of cancer sequences, which when expressed in host cells, inhibit abnormal cellular proliferation and transformation. A therapeutic compound would reduce or eliminate the host cells' ability to grow in stirred suspension culture or suspended in semi-solid media, such as semi-solid or soft.

Techniques for soft agar growth or colony formation in suspension assays are described, e.g., in Freshney (1998) Culture of Animal Cells: A Manual of Basic Technique (3d ed.) Wiley-Liss; Freshney (2000) Culture of Animal Cells: A Manual of Basic Technique (4th ed.) Wiley-Liss; and Garkavtsev, et al. (1996) Nature Genet. 14:415-20.

#### Contact inhibition and density limitation of growth

Normal cells typically grow in a flat and organized pattern in a petri dish until they touch other cells. When the cells touch one another, they are contact inhibited and stop growing. When cells are transformed, however, the cells are not contact inhibited and continue to grow to high densities in disorganized foci. Thus, the transformed cells grow to a higher saturation density than normal cells. This can be detected morphologically by the formation of a disoriented monolayer of cells or rounded cells in foci within the regular pattern of normal surrounding cells. Alternatively, labeling index with (<sup>3</sup>H)-thymidine at saturation density can be used to measure density limitation of growth. See Freshney (2000), supra. The transformed cells, when transfected with tumor suppressor genes, regenerate a normal phenotype and become contact inhibited and would grow to a lower density.

In this assay, labeling index with (<sup>3</sup>H)-thymidine at saturation density is a preferred method of measuring density limitation of growth. Transformed host cells are transfected with a cancer-associated sequence and are grown for 24 hours at saturation density in non-limiting medium conditions. The percentage of cells labeling with (<sup>3</sup>H)-thymidine is determined autoradiographically. See, Freshney (1998), supra.

#### Growth factor or serum dependence

Transformed cells typically have a lower serum dependence than their normal counterparts (see, e.g., Temin (1966) J. Natl. Cancer Inst. 37:167-175; Eagle, et al.(1970) J. Exp. Med. 131:836-879); Freshney, supra. This is in part due to release of various growth  
5 factors by the transformed cells. Growth factor or serum dependence of transformed host cells can be compared with that of control.

#### Tumor specific markers levels

Tumor cells release an increased amount of certain factors (hereinafter "tumor specific markers") than their normal counterparts. For example, plasminogen activator (PA) is released  
10 from human glioma at a higher level than from normal brain cells (see, e.g., Gullino "Angiogenesis, tumor vascularization, and potential interference with tumor growth" pp. 178-184 in Mihich (ed. 1985) Biological Responses in Cancer Plenum. Similarly, tumor angiogenesis factor (TAF) is released at a higher level in tumor cells than their normal  
counterparts. See, e.g., Folkman (1992) Sem. Cancer Biol. 3:89-96.

15 Various techniques which measure the release of these factors are described in Freshney (1998), supra. Also, see, Unkeless, et al. (1974) J. Biol. Chem. 249:4295-4305; Strickland and Beers (1976) J. Biol. Chem. 251:5694-5702; Whur, et al. (1980) Br. J. Cancer 42:305-312; Gullino "Angiogenesis, tumor vascularization, and potential interference with tumor growth" pp. 178-184 in Mihich (ed. 1985) Biological Responses in Cancer Plenum; Freshney (1985)  
20 Anticancer Res. 5:111-130.

#### Invasiveness into Matrigel

The degree of invasiveness into Matrigel or some other extracellular matrix constituent can be used as an assay to identify compounds that modulate cancer-associated sequences. Tumor cells exhibit a good correlation between malignancy and invasiveness of cells into  
25 Matrigel or some other extracellular matrix constituent. In this assay, tumorigenic cells are typically used as host cells. Expression of a tumor suppressor gene in these host cells would decrease invasiveness of the host cells.

Techniques described in Freshney (1994), supra, can be used. Briefly, the level of invasion of host cells can be measured by using filters coated with Matrigel or some other  
30 extracellular matrix constituent. Penetration into the gel, or through to the distal side of the filter, is rated as invasiveness, and rated histologically by number of cells and distance moved,

or by prelabeling the cells with  $^{125}\text{I}$  and counting the radioactivity on the distal side of the filter or bottom of the dish. See, e.g., Freshney (1984), supra.

#### Tumor growth in vivo

Effects of cancer-associated sequences on cell growth can be tested in transgenic or immune-suppressed mice. Knock-out transgenic mice can be made, in which the cancer gene is disrupted or in which a cancer gene is inserted. Knock-out transgenic mice can be made by insertion of a marker gene or other heterologous gene into the endogenous cancer gene site in the mouse genome via homologous recombination. Such mice can also be made by substituting the endogenous cancer gene with a mutated version of the cancer gene, or by mutating the endogenous cancer gene, e.g., by exposure to carcinogens.

A DNA construct is introduced into the nuclei of embryonic stem cells. Cells containing the newly engineered genetic lesion are injected into a host mouse embryo, which is re-implanted into a recipient female. Some of these embryos develop into chimeric mice that possess germ cells partially derived from the mutant cell line. Therefore, by breeding the chimeric mice it is possible to obtain a new line of mice containing the introduced genetic lesion (see, e.g., Capecchi, et al. (1989) Science 244:1288-1292). Chimeric targeted mice can be derived according to Hogan, et al. (1988) Manipulating the Mouse Embryo: A Laboratory Manual CSH Press; and Robertson (ed. 1987) Teratocarcinomas and Embryonic Stem Cells: A Practical Approach IRL Press, Washington, D.C.

Alternatively, various immune-suppressed or immune-deficient host animals can be used. For example, genetically athymic "nude" mouse (see, e.g., Giovanella, et al. (1974) J. Natl. Cancer Inst. 52:921-930), a SCID mouse, a thymectomized mouse, or an irradiated mouse (see, e.g., Bradley, et al. (1978) Br. J. Cancer 38:263-272; Selby, et al. (1980) Br. J. Cancer 41:52-61) can be used as a host. Transplantable tumor cells (typically about  $10^6$  cells) injected into isogenic hosts will produce invasive tumors in a high proportions of cases, while normal cells of similar origin will not. In hosts which developed invasive tumors, cells expressing a cancer-associated sequences are injected subcutaneously. After a suitable length of time, preferably 4-8 weeks, tumor growth is measured (e.g., by volume or by its two largest dimensions) and compared to the control. Tumors that have statistically significant reduction (using, e.g., Student's T test) are said to have inhibited growth.

## Polynucleotide modulators of cancer

## Antisense and RNAi Polynucleotides

In certain embodiments, the activity of a cancer-associated protein is down-regulated, or entirely inhibited, by the use of an inhibitory or antisense polynucleotide, e.g., a nucleic acid  
5 complementary to, and which can preferably hybridize specifically to, a coding mRNA nucleic acid sequence, e.g., a cancer protein mRNA, or a subsequence thereof. Binding of the antisense polynucleotide to the mRNA reduces the translation and/or stability of the mRNA.

In the context of this invention, antisense polynucleotides can comprise naturally-occurring nucleotides, or synthetic species formed from naturally-occurring subunits or their  
10 close homologs. Antisense polynucleotides may also have altered sugar moieties or inter-sugar linkages. Exemplary among these are the phosphorothioate and other sulfur containing species. Analogs are comprehended by this invention so long as they function effectively to hybridize with the cancer protein mRNA. See, e.g., Isis Pharmaceuticals, Carlsbad, CA; Sequitor, Inc., Natick, MA.

15 Such antisense polynucleotides can readily be synthesized using recombinant means, or can be synthesized in vitro. Equipment for such synthesis is sold by several vendors, including Applied Biosystems. The preparation of other oligonucleotides such as phosphorothioates and alkylated derivatives is also well known.

Antisense molecules as used herein include antisense or sense oligonucleotides. Sense  
20 oligonucleotides can, e.g., be employed to block transcription by binding to the anti-sense strand. The antisense and sense oligonucleotide comprise a single-stranded nucleic acid sequence (either RNA or DNA) capable of binding to target mRNA (sense) or DNA (antisense) sequences for cancer molecules. A preferred antisense molecule is for a cancer sequences in the Tables, or for a ligand or activator thereof. Antisense or sense oligonucleotides, according to  
25 the present invention, comprise a fragment generally at least about 14 nucleotides, preferably from about 14-30 nucleotides. The ability to derive an antisense or a sense oligonucleotide, based upon a cDNA sequence encoding a given protein is described in, e.g., Stein and Cohen (1988) Cancer Res. 48:2659-2668; and van der Krol, et al. (1988) BioTechniques 6:958-976.

RNA interference is a mechanism to suppress gene expression in a sequence specific  
30 manner. See, e.g., Brumelkamp, et al. (2002) Scienceexpress (21March2002); Sharp (1999) Genes Dev. 13:139-141; and Cathew (2001) Curr. Op. Cell Biol. 13:244-248. In mammalian cells, short, e.g., 21 nt, double stranded small interfering RNAs (siRNA) have been shown to be



effective at inducing an RNAi response. See, e.g., Elbashir, et al. (2001) Nature 411:494-498. The mechanism may be used to downregulate expression levels of identified genes, e.g., treatment of or validation of relevance to disease.

#### Ribozymes

5           In addition to antisense polynucleotides, ribozymes can be used to target and inhibit transcription of cancer-associated nucleotide sequences. A ribozyme is an RNA molecule that catalytically cleaves other RNA molecules. Different kinds of ribozymes have been described, including group I ribozymes, hammerhead ribozymes, hairpin ribozymes, RNase P, and axhead ribozymes (see, e.g., Castanotto, et al. (1994) Adv. in Pharmacology 25: 289-317 for a general  
10 review of the properties of different ribozymes).

          The general features of hairpin ribozymes are described, e.g., in Hampel, et al. (1990) Nucl. Acids Res. 18:299-304; European Patent Publication No. 0 360 257; U.S. Patent No. 5,254,678. Methods of preparation are described in, e.g., WO 94/26877; Ojwang, et al. (1993) Proc. Natl. Acad. Sci. USA 90:6340-6344; Yamada, et al. (1994) Human Gene Therapy 1:39-  
15 45; Leavitt, et al.(1995) Proc. Natl. Acad. Sci. USA 92:699-703; Leavitt, et al. (1994) Human Gene Therapy 5:1151-120; and Yamada, et al. (1994) Virology 205: 121-126.

          Polynucleotide modulators of cancer may be introduced into a cell containing the target nucleotide sequence by formation of a conjugate with a ligand binding molecule, as described in WO 91/04753. Suitable ligand binding molecules include, but are not limited to, cell surface  
20 receptors, growth factors, other cytokines, or other ligands that bind to cell surface receptors. Preferably, conjugation of the ligand binding molecule does not substantially interfere with the ability of the ligand binding molecule to bind to its corresponding molecule or receptor, or block entry of the sense or antisense oligonucleotide or its conjugated version into the cell. Alternatively, a polynucleotide modulator of cancer may be introduced into a cell containing the  
25 target nucleic acid sequence, e.g., by formation of an polynucleotide-lipid complex, as described in WO 90/10448. It is understood that the use of antisense molecules or knock out and knock in models may also be used in screening assays as discussed above, in addition to methods of treatment.

          Thus, in one embodiment, methods of modulating cancer in cells or organisms are  
30 provided. In one embodiment, the methods comprise administering to a cell an anti-cancer antibody that reduces or eliminates the biological activity of an endogenous cancer protein. Alternatively, the methods comprise administering to a cell or organism a recombinant nucleic

acid encoding a cancer protein. This may be accomplished in any number of ways. In a preferred embodiment, e.g., when the cancer sequence is down-regulated in cancer, such state may be reversed by increasing the amount of cancer gene product in the cell. This can be accomplished, e.g., by overexpressing the endogenous cancer gene or administering a gene  
5 encoding the cancer sequence, using known gene-therapy techniques. In a preferred embodiment, the gene therapy techniques include the incorporation of the exogenous gene using enhanced homologous recombination (EHR), e.g., as described in PCT/US93/0386. Alternatively, e.g., when the cancer sequence is up-regulated in cancer, the activity of the endogenous cancer gene is decreased, e.g., by the administration of a cancer antisense or other  
10 inhibitor, e.g., RNAi.

In one embodiment, the cancer proteins of the present invention may be used to generate polyclonal and monoclonal antibodies to cancer proteins. Similarly, the cancer proteins can be coupled, using standard technology, to affinity chromatography columns. These columns may then be used to purify cancer antibodies useful for production, diagnostic, or therapeutic  
15 purposes. In a preferred embodiment, the antibodies are generated to epitopes unique to a cancer protein; that is, the antibodies show little or no cross-reactivity to other proteins. The cancer antibodies may be coupled to standard affinity chromatography columns and used to purify cancer proteins. The antibodies may also be used as blocking polypeptides, as outlined above, since they will specifically bind to the cancer protein.

#### 20 Methods of identifying variant cancer-associated sequences

Without being bound by theory, expression of various cancer sequences is correlated with cancer. Accordingly, disorders based on mutant or variant cancer genes may be determined. In one embodiment, the invention provides methods for identifying cells containing variant cancer genes, e.g., determining all or part of the sequence of at least one  
25 endogenous cancer gene in a cell. In a preferred embodiment, the invention provides methods of identifying the cancer genotype of an individual, e.g., determining all or part of the sequence of at least one cancer gene of the individual. This is generally done in at least one tissue of the individual, and may include the evaluation of a number of tissues or different samples of the same tissue. The method may include comparing the sequence of the sequenced cancer gene to  
30 a known cancer gene, e.g., a wild-type gene.

The sequence of all or part of the cancer gene can then be compared to the sequence of a known cancer gene to determine if any differences exist. This can be done using known

homology programs, such as Bestfit, etc. In a preferred embodiment, the presence of a difference in the sequence between the cancer gene of the patient and the known cancer gene correlates with a disease state or a propensity for a disease state, as outlined herein.

In a preferred embodiment, the cancer genes are used as probes to determine the number  
5 of copies of the cancer gene in the genome.

In another preferred embodiment, the cancer genes are used as probes to determine the chromosomal localization of the cancer genes. Information such as chromosomal localization finds use in providing a diagnosis or prognosis in particular when chromosomal abnormalities such as translocations, and the like are identified in the cancer gene locus.

#### 10 Administration of pharmaceutical and vaccine compositions

In one embodiment, a therapeutically effective dose of a cancer protein or modulator thereof, is administered to a patient. By "therapeutically effective dose" herein is meant a dose that produces effects for which it is administered. The exact dose will depend on the purpose of the treatment, and will be ascertainable using known techniques. See, e.g., Ansel, et al. (1999)  
15 Pharmaceutical Dosage Forms and Drug Delivery Lippincott; Lieberman (1992) Pharmaceutical Dosage Forms (vols. 1-3) Dekker, ISBN 0824770846, 082476918X, 0824712692, 0824716981; Lloyd (1999) The Art, Science and Technology of Pharmaceutical Compounding Amer. Pharmaceut. Assn.; and Pickar (1998) Dosage Calculations Thomson. Adjustments for cancer degradation, systemic versus localized delivery, and rate of new protease synthesis, as well as  
20 the age, body weight, general health, sex, diet, time of administration, drug interaction and the severity of the condition may be necessary. U.S. Patent Application No. 09/687,576, further discloses the use of compositions and methods of diagnosis and treatment in cancer.

A "patient" for the purposes of the present invention includes both humans and other animals, particularly mammals. Thus the methods are applicable to both human therapy and  
25 veterinary applications. In the preferred embodiment the patient is a mammal, preferably a primate, and in the most preferred embodiment the patient is human.

The administration of the cancer proteins and modulators thereof of the present invention can be done in a variety of ways, including, but not limited to, orally, subcutaneously, intravenously, intranasally, transdermally, intraperitoneally, intramuscularly, intrapulmonary,  
30 vaginally, rectally, or intraocularly. In some instances, e.g., in the treatment of wounds and inflammation, the cancer proteins and modulators may be directly applied as a solution or spray.

The pharmaceutical compositions of the present invention comprise a cancer protein in a form suitable for administration to a patient. In the preferred embodiment, the pharmaceutical compositions are in a water soluble form, such as being present as pharmaceutically acceptable salts, which is meant to include both acid and base addition salts. "Pharmaceutically acceptable acid addition salt" refers to those salts that retain the biological effectiveness of the free bases and that are not biologically or otherwise undesirable, formed with inorganic acids such as hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, phosphoric acid, and the like, and organic acids such as acetic acid, propionic acid, glycolic acid, pyruvic acid, oxalic acid, maleic acid, malonic acid, succinic acid, fumaric acid, tartaric acid, citric acid, benzoic acid, cinnamic acid, mandelic acid, methanesulfonic acid, ethanesulfonic acid, p-toluenesulfonic acid, salicylic acid, and the like. "Pharmaceutically acceptable base addition salts" include those derived from inorganic bases such as sodium, potassium, lithium, ammonium, calcium, magnesium, iron, zinc, copper, manganese, aluminum salts, and the like. Particularly preferred are the ammonium, potassium, sodium, calcium, and magnesium salts. Salts derived from pharmaceutically acceptable organic non-toxic bases include salts of primary, secondary, and tertiary amines, substituted amines including naturally occurring substituted amines, cyclic amines and basic ion exchange resins, such as isopropylamine, trimethylamine, diethylamine, triethylamine, tripropylamine, and ethanolamine.

The pharmaceutical compositions may also include one or more of the following: carrier proteins such as serum albumin; buffers; fillers such as microcrystalline cellulose, lactose, corn and other starches; binding agents; sweeteners and other flavoring agents; coloring agents; and polyethylene glycol.

The pharmaceutical compositions can be administered in a variety of unit dosage forms depending upon the method of administration. For example, unit dosage forms suitable for oral administration include, but are not limited to, powder, tablets, pills, capsules and lozenges. It is recognized that cancer protein modulators (e.g., antibodies, antisense constructs, ribozymes, small organic molecules, etc.) when administered orally, should be protected from digestion. This is typically accomplished either by complexing the molecule(s) with a composition to render it resistant to acidic and enzymatic hydrolysis, or by packaging the molecule(s) in an appropriately resistant carrier, such as a liposome or a protection barrier. Means of protecting agents from digestion are available.

The compositions for administration will commonly comprise a cancer protein modulator dissolved in a pharmaceutically acceptable carrier, preferably an aqueous carrier. A variety of aqueous carriers can be used, e.g., buffered saline and the like. These solutions are sterile and generally free of undesirable matter. These compositions may be sterilized by  
5 conventional, well known sterilization techniques. The compositions may contain pharmaceutically acceptable auxiliary substances as required to approximate physiological conditions such as pH adjusting and buffering agents, toxicity adjusting agents, and the like, e.g., sodium acetate, sodium chloride, potassium chloride, calcium chloride, sodium lactate, and the like. The concentration of active agent in these formulations can vary widely, and will be  
10 selected primarily based on fluid volumes, viscosities, body weight, and the like in accordance with the particular mode of administration selected and the patient's needs (e.g., (1980) Remington's Pharmaceutical Science (18th ed.) Mack, and Hardman and Limbird (eds. 2001) Goodman and Gilman: The Pharmacological Basis of Therapeutics (10th ed.) McGraw-Hill.

Thus, a typical pharmaceutical composition for intravenous administration would be  
15 about 0.1 to 10 mg per patient per day. Dosages from 0.1 up to about 100 mg per patient per day may be used, particularly when the drug is administered to a secluded site and not into the blood stream, such as into a body cavity or into a lumen of an organ. Substantially higher dosages are possible in topical administration. Actual methods for preparing parenterally administrable compositions will be known or apparent.

20 The compositions containing modulators of cancer proteins can be administered for therapeutic or prophylactic treatments. In therapeutic applications, compositions are administered to a patient suffering from a disease (e.g., a cancer) in an amount sufficient to cure or at least partially arrest the disease and its complications. An amount adequate to accomplish this is defined as a "therapeutically effective dose." Amounts effective for this use will depend  
25 upon the severity of the disease and the general state of the patient's health. Single or multiple administrations of the compositions may be administered depending on the dosage and frequency as required and tolerated by the patient. In any event, the composition should provide a sufficient quantity of the agents of this invention to effectively treat the patient. An amount of modulator that is capable of preventing or slowing the development of cancer in a  
30 mammal is referred to as a "prophylactically effective dose." The particular dose required for a prophylactic treatment will depend upon the medical condition and history of the mammal, the particular cancer being prevented, as well as other factors such as age, weight, gender,

administration route, efficiency, etc. Such prophylactic treatments may be used, e.g., in a mammal who has previously had cancer to prevent a recurrence of the cancer, or in a mammal who is suspected of having a significant likelihood of developing cancer based, at least in part, upon gene expression profiles. Vaccine strategies may be used, in either a DNA vaccine form, or protein vaccine.

It will be appreciated that the present cancer protein-modulating compounds can be administered alone or in combination with additional cancer modulating compounds or with other therapeutic agent, e.g., other anti-cancer agents or treatments.

In numerous embodiments, one or more nucleic acids, e.g., polynucleotides comprising nucleic acid sequences set forth in the Tables, such as RNAi, antisense polynucleotides or ribozymes, will be introduced into cells, in vitro or in vivo. The present invention provides methods, reagents, vectors, and cells useful for expression of cancer-associated polypeptides and nucleic acids using in vitro (cell-free), ex vivo or in vivo (cell or organism-based) recombinant expression systems.

The particular procedure used to introduce the nucleic acids into a host cell for expression of a protein or nucleic acid is application specific. Many procedures for introducing foreign nucleotide sequences into host cells may be used. These include the use of calcium phosphate transfection, spheroplasts, electroporation, liposomes, microinjection, plasma vectors, viral vectors, and other well known methods for introducing cloned genomic DNA, cDNA, synthetic DNA, or other foreign genetic material into a host cell (see, e.g., Berger and Kimmel (1987) Guide to Molecular Cloning Techniques from Methods in Enzymology (vol. 152) Academic Press; Ausubel, et al. (eds. 1999 and supplements) Current Protocols Lippincott; and Sambrook, et al. (2001) Molecular Cloning: A Laboratory Manual (3d ed., Vol. 1-3) CSH Press.

In a preferred embodiment, cancer proteins and modulators are administered as therapeutic agents, and can be formulated as outlined above. Similarly, cancer genes (including both the full-length sequence, partial sequences, or regulatory sequences of the cancer coding regions) can be administered in a gene therapy application. These cancer genes can include inhibitory applications, e.g., as inhibitory RNA, gene therapy (e.g., for incorporation into the genome), or antisense compositions.

Cancer polypeptides and polynucleotides can also be administered as vaccine compositions to stimulate HTL, CTL, and antibody responses. Such vaccine compositions can

include, e.g., lipidated peptides (see, e.g., Vitiello, et al. (1995) J. Clin. Invest. 95:341-349), peptide compositions encapsulated in poly(DL-lactide-co-glycolide) ("PLG") microspheres (see, e.g., Eldridge, et al. (1991) Molec. Immunol. 28:287-294.; Alonso, et al. (1994) Vaccine 12:299-306; Jones, et al. (1995) Vaccine 13:675-681), peptide compositions contained in

5 immune stimulating complexes (ISCOMS) (see, e.g., Takahashi, et al. (1990) Nature 344:873-875; Hu, et al. (1998) Clin Exp Immunol. 113:235-243), multiple antigen peptide systems (MAPs) (see, e.g., Tam (1988) Proc. Natl. Acad. Sci. USA 85:5409-5413; Tam (1996) J. Immunol. Methods 196:17-32), peptides formulated as multivalent peptides; peptides for use in ballistic delivery systems, typically crystallized peptides, viral delivery vectors (Perkus, et al., p.

10 379, in Kaufmann (ed. 1996) Concepts in Vaccine Development de Gruyter; Chakrabarti, et al. (1986) Nature 320:535-537; Hu, et al. (1986) Nature 320:537-540; Kieny, et al. (1986) Bio/Technology 4:790-795; Top, et al. (1971) J. Infect. Dis. 124:148-154; Chanda, et al. (1990) Virology 175:535-547), particles of viral or synthetic origin (see, e.g., Kofler, et al. (1996) J. Immunol. Methods 192:25-35; Eldridge, et al. (1993) Sem. Hematol. 30:16-24; Falo, et al.

15 (1995) Nature Med. 1:649-653), adjuvants (Warren, et al. (1986) Annu. Rev. Immunol. 4:369-388; Gupta, et al. (1993) Vaccine 11:293-306), liposomes (Reddy, et al. (1992) J. Immunol. 148:1585-1589; Rock (1996) Immunol. Today 17:131-137), or, naked or particle absorbed cDNA (Ulmer, et al. (1993) Science 259:1745-1749; Robinson, et al. (1993) Vaccine 11:957-960; Shiver, et al., p 423, in Kaufmann (ed. 1996) Concepts in Vaccine Development de

20 Gruyter; Cease and Berzofsky (1994) Annu. Rev. Immunol. 12:923-989; and Eldridge, et al. (1993) Sem. Hematol. 30:16-24). Toxin-targeted delivery technologies, also known as receptor mediated targeting, such as those of Avant Immunotherapeutics, Inc. (Needham, Massachusetts) may also be used.

Vaccine compositions often include adjuvants. Many adjuvants contain a substance

25 designed to protect the antigen from rapid catabolism, such as aluminum hydroxide or mineral oil, and a stimulator of immune responses, such as lipid A, Bortadella pertussis, or Mycobacterium tuberculosis derived proteins. Certain adjuvants are commercially available as, e.g., Freund's Incomplete Adjuvant and Complete Adjuvant (Difco Laboratories, Detroit, MI); Merck Adjuvant 65 (Merck and Company, Inc., Rahway, NJ); AS-2 (SmithKline Beecham,

30 Philadelphia, PA); aluminum salts such as aluminum hydroxide gel (alum) or aluminum phosphate; salts of calcium, iron, or zinc; an insoluble suspension of acylated tyrosine; acylated sugars; cationically or anionically derivatized polysaccharides; polyphosphazenes;

biodegradable microspheres; monophosphoryl lipid A and quil A. Cytokines, such as GM-CSF, interleukin-2, -7, -12, and other like growth factors, may also be used as adjuvants.

Vaccines can be administered as nucleic acid compositions wherein DNA or RNA encoding one or more of the polypeptides, or a fragment thereof, is administered to a patient.

5 This approach is described, for instance, in Wolff et. al. (1990) Science 247:1465-1468, as well as U.S. Patent Nos. 5,580,859; 5,589,466; 5,804,566; 5,739,118; 5,736,524; 5,679,647; WO 98/04720; and in more detail below. Examples of DNA-based delivery technologies include "naked DNA", facilitated (bupivacaine, polymers, peptide-mediated) delivery, cationic lipid complexes, and particle-mediated ("gene gun") or pressure-mediated delivery (see, e.g., U.S. 10 Patent No. 5,922,687).

For therapeutic or prophylactic immunization purposes, the peptides of the invention can be expressed by viral or bacterial vectors. Examples of expression vectors include attenuated viral hosts, such as vaccinia or fowlpox. This approach involves the use of vaccinia virus, e.g., as a vector to express nucleotide sequences that encode cancer polypeptides or polypeptide 15 fragments. Upon introduction into a host, the recombinant vaccinia virus expresses the immunogenic peptide, and thereby elicits an immune response. Vaccinia vectors and methods useful in immunization protocols are described in, e.g., U.S. Patent No. 4,722,848. Another vector is BCG (Bacille Calmette Guerin). BCG vectors are described in Stover, et al. (1991) Nature 351:456-460. A wide variety of other vectors are available for therapeutic 20 administration or immunization, e.g., adeno and adeno-associated virus vectors, retroviral vectors, Salmonella typhi vectors, detoxified anthrax toxin vectors, and the like. See, e.g., Shata, et al. (2000) Mol Med Today 6:66-71; Shedlock, et al. (2000) J. Leukoc. Biol. 68:793-806; Hipp, et al. (2000) In Vivo 14:571-85.

Methods for the use of genes as DNA vaccines are well known, and include placing a 25 cancer gene or portion of a cancer gene under the control of a regulatable promoter or a tissue-specific promoter for expression in a cancer patient. The cancer gene used for DNA vaccines can encode full-length cancer proteins, but more preferably encodes portions of the cancer proteins including peptides derived from the cancer protein. In one embodiment, a patient is immunized with a DNA vaccine comprising a plurality of nucleotide sequences derived from a 30 cancer gene. For example, cancer-associated genes or sequence encoding subfragments of a cancer protein are introduced into expression vectors and tested for their immunogenicity in the context of Class I MHC and an ability to generate cytotoxic T cell responses. This procedure



provides for production of cytotoxic T cell responses against cells which present antigen, including intracellular epitopes.

In a preferred embodiment, DNA vaccines include a gene encoding an adjuvant molecule with the DNA vaccine. Such adjuvant molecules include cytokines that increase the immunogenic response to the cancer polypeptide encoded by the DNA vaccine. Additional or alternative adjuvants are available.

In another preferred embodiment, cancer genes find use in generating animal models of cancer. When the cancer gene identified is repressed or diminished in cancer tissue, gene therapy technology, e.g., wherein inhibitory or antisense RNA directed to the cancer gene will also diminish or repress expression of the gene. Animal models of cancer find use in screening for modulators of a cancer-associated sequence or modulators of cancer. Similarly, transgenic animal technology, including gene knockout technology, e.g., as a result of homologous recombination with an appropriate gene targeting vector, will result in the absence or increased expression of the cancer protein. When desired, tissue-specific expression or knockout of the cancer protein may be necessary.

It is also possible that the cancer protein is overexpressed in cancer. As such, transgenic animals can be generated that overexpress the cancer protein. Depending on the desired expression level, promoters of various strengths can be employed to express the transgene. Also, the number of copies of the integrated transgene can be determined and compared for a determination of the expression level of the transgene. Animals generated by such methods will find use as animal models of cancer and are additionally useful in screening for modulators to treat cancer.

#### Kits for Use in Diagnostic and/or Prognostic Applications

For use in diagnostic, research, and therapeutic applications suggested above, kits are also provided by the invention. In diagnostic and research applications, such kits may include at least one of the following: assay reagents, buffers, cancer-specific nucleic acids or antibodies, hybridization probes and/or primers, antisense polynucleotides, ribozymes, dominant negative cancer polypeptides or polynucleotides, small molecule inhibitors of cancer-associated sequences etc. A therapeutic product may include sterile saline or another pharmaceutically acceptable emulsion and suspension base.

In addition, the kits may include instructional materials containing instructions (e.g., protocols) for the practice of the methods of this invention. While the instructional materials

typically comprise written or printed materials, they are not limited to such. A medium capable of storing such instructions and communicating them to an end user is contemplated by this invention. Such media include, but are not limited to, electronic storage media (e.g., magnetic discs, tapes, cartridges, chips), optical media (e.g., CD ROM), and the like. Such media may  
5 include addresses to internet sites that provide such instructional materials.

The present invention also provides for kits for screening for modulators of cancer-associated sequences. Such kits can be prepared from readily available materials and reagents. For example, such kits can comprise one or more of the following materials: a cancer-associated polypeptide or polynucleotide, reaction tubes, and instructions for testing cancer-associated  
10 activity. Optionally, the kit contains biologically active cancer protein. A wide variety of kits and components can be prepared according to the present invention, depending upon the intended user of the kit and the particular needs of the user. Diagnosis would typically involve evaluation of a plurality of genes or products. The genes will typically be selected based on correlations with important parameters in disease which may be identified in historical or  
15 outcome data.

## EXAMPLES

### Example 1: Gene Chip Analysis

Molecular profiles of various normal and cancerous tissues were determined and  
20 analyzed using gene chips. RNA was isolated and gene chip analysis was performed as described (Glynne, et al. (2000) Nature 403:672-676; Zhao, et al. (2000) Genes Dev. 14:981-993).

Table 1 lists medical conditions, abnormalities, or organs affected by disease, referred to in Tables 2A-68, for which markers have been identified, and other related medical conditions (including various stages and/or metastases) in which those markers will also be useful, e.g., in therapeutic, diagnostic, prognostic, subsetting, vaccine, and other uses.

- 5 blood vessels/angiogenesis: hemangiomas, lymphangiomas, wound healing, tissue remodeling, psoriasis, ischemic heart disease, inflammatory diseases (e.g., arthritis, asthma, chronic bronchitis), atherosclerosis, endometriosis, presumed ocular histoplasmosis syndrome, hypoxia, solid tumors, lymphomas, autoimmune diseases (e.g., RA, SLE, juvenile chronic arthritis, pigmented villonodular synovitis, etc.), retinal neovascularization syndromes (e.g., diabetic retinopathy, macular degeneration, presumed ocular histoplasmosis syndrome, etc.), scleritis/conjunctivitis, hypertrophic scars (keloid), birth control, uterine fibroids
- 10 bladder: carcinoma in situ, papillary carcinomas, transitional cell carcinoma  
bone marrow: Ewing sarcoma, sarcomas arising from skeletal and extraskeletal connective tissues, including the peripheral nervous system  
brain: glioblastoma, oligodendroglioma, anaplastic astrocytoma, meningioma, medulloblastoma, neuroblastoma, ependymoma, schwannoma, craniopharyngioma, pineoblastoma, pineocytoma
- breast: ductal carcinoma in situ, lobular carcinoma in situ  
cervix: cancer of the cervix, vagina, or vulva
- 15 colon/rectum: precancerous colorectal disease (e.g., neoplastic polyps (adenomas), familial adenomatous polyposis, ulcerative colitis), colon cancer, e.g., epithelial tumor (e.g., adenocarcinoma, mucinous adenocarcinoma, signet-ring cell adenocarcinoma, squamous cell carcinoma, adenosquamous carcinoma, undifferentiated carcinoma, unclassified carcinoma), carcinoid tumor (e.g., argentaffin, nonargentaffin, composite), non-epithelial tumor (e.g., leiomyosarcoma, others), inflammatory bowel disease (e.g., ulcerative colitis, Crohn's disease (granulomatous colitis), dysplasia), rectal cancer, cancer of the anal region (e.g., squamous cell carcinoma, transitional carcinoma, adenocarcinoma, carcinoma, papillary villous carcinoma, mucinous adenocarcinoma, melanoma)
- 20 esophagus: premalignant or predisposing conditions (e.g., esophagitis), squamous cell cancers (e.g., cancers of the head and neck, lung, or cervix), gastrointestinal carcinomas (e.g., cancers of the stomach, colon, or rectum)
- fibrosis: lung fibrosis (idiopathic pulmonary fibrosis, hypersensitivity pneumonitis, interstitial pneumonitis, nonspecific idiopathic pneumonitis), chronic obstructive pulmonary disease (e.g., emphysema, chronic bronchitis), asthma, bronchiectasis, cirrhosis (liver fibrosis), renal fibrosis, scleroderma, wound healing
- head and neck: tumors of the nasal cavity, paranasal sinuses, nasopharynx, oral cavity, oral pharynx, larynx, hypopharynx, salivary glands, paragangliomas, esophagus
- 25 kidney: clear cell (non-papillary) carcinoma, papillary carcinoma, chromophobe renal carcinoma, hypemephroma, adenocarcinoma, sporadic renal carcinomas, hereditary renal carcinomas (von Hippel-Lindau disease), carcinoma of the renal pelvis, ureteral carcinoma, fibroma, papillary adenoma, angiolymphoma, oncocytoma
- leukocytes: acute lymphoblastic leukemia/lymphoma, malignant transformation of immature, precursor B (pre-B) or precursor T (pre-T) lymphocytes, or lymphoblasts, arthritis, inflammation, wound healing
- liver: hepatitis (e.g., types A, B, C), benign epithelial tumors and tumor bile conditions, primary malignant epithelial tumors, primary malignant mesenchymal tumors, tumors of the gallbladder or bile duct
- 30 lung: lung cancer, small cell lung carcinoma (oat cell carcinoma), non-small cell carcinomas (e.g., squamous cell carcinoma, adenocarcinoma, large cell lung carcinoma, carcinoid, granulomatous), fibrosis (idiopathic pulmonary fibrosis, hypersensitivity pneumonitis, interstitial pneumonitis, nonspecific idiopathic pneumonitis), chronic obstructive pulmonary disease (e.g., emphysema, chronic bronchitis), asthma, bronchiectasis, esophageal cancer
- ovary: ovarian carcinoma (e.g., epithelial (serous tumors, mucinous tumors, endometrioid tumors), germ cell (e.g., teratomas, choriocarcinomas, polyembryomas, embryonal carcinoma, endodermal sinus tumor, dysgerminoma, gonadoblastoma), stromal carcinomas (e.g., granulosa stromal cell tumors)), fallopian tube carcinoma, peritoneal carcinoma, leiomyoma
- 35 pancreas: adenocarcinoma, ductal adenocarcinoma, mucinous cyst adenocarcinoma, acinar cell carcinoma, unclassified large cell carcinoma, small cell carcinoma, pancreatoblastoma, duct-ectatic mucin-hypersecreting tumor, mucinous cyst adenoma, papillary cystic neoplasm, serous cyst adenoma, diabetes mellitus, chronic pancreatitis
- prostate: epithelial neoplasms (e.g., adenocarcinoma, small cell tumors, transitional cell carcinoma, carcinoma in situ, and basal cell carcinoma), carcinosarcoma, non-epithelial neoplasms (e.g., mesenchymal and lymphoma), germ cell tumors, prostatic intraepithelial neoplasia (PIN), hormone independent prostate cancer, benign prostate hyperplasia, prostatitis
- 40 skin/melanoma: melanoma, lentigo (common benign localized hyperplasia of melanocytes), nevocellular nevi (congenital or acquired neoplasm of melanocytes), actinic keratosis (overgrowth of outer layers of skin), basal cell carcinoma, Merkel cell carcinoma, benign fibrous histiocytoma (dermal neoplasms of fibroblasts and histiocytes), dermatofibrosarcoma protuberans (well differentiated fibrosarcoma of the skin), xanthomas (tumor-like collections of foamy histiocytes within the dermis), dermal vascular tumors, seborrheic keratoses (benign tumor), acanthosis nigricans (benign or malignant hyperplasia and squamous cell carcinomas of the skin, lung, cervix, esophagus, uterus, head, neck, or bladder)
- 45 stomach: adenocarcinoma, squamous cell carcinoma, adenocarcinoma, carcinoid, leiomyosarcoma, gastritis (chronic atrophic, H. pylori associated), hyperplastic polyps, lipoma, leiomyoma, esophageal adenocarcinomas
- testis: germ cell tumors (including seminomas, embryonal carcinomas, teratomas, choriocarcinomas, yolk sac tumors), sex chord stromal tumors (including Leydig cell tumors, Sertoli cell tumors, and Granulosa cell tumors), germ cell and gonadal stromal elements (e.g., gonadoblastomas), adnexal and paratesticular tumors (e.g., mesotheliomas, soft tissue sarcomas, and adnexal of the rete testes), miscellaneous neoplasms (including carcinoid, lymphoma, and cysts)
- 50 uterus: epithelial tumors (e.g., endometrioid, papillary endometrioid, papillary serous, clear cell, mucinous), mesenchymal tumors (e.g., endometrial stromal sarcoma, leiomyosarcoma, nonspecific sarcomas), mixed tumors (e.g., malignant mixed müllerian tumors, adenosarcoma)

55 Tables 2B-66C list accession numbers for Pkeys lacking UniGeneID's for Tables 2A-66C, respectively. For each probeset is listed gene cluster number from which oligonucleotides were designed. Gene clusters were compiled using sequences derived from Genbank ESTs and mRNAs. These sequences were clustered based on sequence similarity using Clustering and Alignment Tools (DoubleTwist, Oakland California). Genbank accession numbers for sequences comprising each cluster are listed in the "Accession" column.

60 Tables 2C-66C list genomic positioning for Pkeys lacking UniGene ID's and accession numbers in Tables 2A-66C, respectively. For each predicted exon is listed genomic sequence source used for prediction. Nucleotide locations of each predicted exon are also listed.

TABLE 2A: ABOUT 1031 GENES UP-REGULATED IN ACUTE LYMPHOCYTIC LEUKEMIA (ALL)

Table 2A lists about 1031 genes up-regulated in acute lymphocytic leukemia (ALL) compared to normal adult tissues. These were selected from 35403 probesets on the Affymetrix/Eos HuD1 GeneChip array such that the ratio of "average" leukemia to "average" normal adult tissues was greater than or equal to 1.7. The "average" leukemia level was set to the 75<sup>th</sup> percentile amongst various ALL samples. The "average" normal adult tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 7.5<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
ExAcc: Exemplar Accession number, Genbank accession number  
UniGeneID: UniGene number  
UniGene Title: UniGene gene title  
R1: Ratio of leukemia to normal body tissue

Pkey	ExAcc	UniGeneID	UniGene Title	R1
100458	S74019	Hs.247979	pre-B lymphocyte gene 1	46.8
113089	T40707	Hs.270852	ESTs	20.4
106956	R06428	Hs.226351	ESTs	15.8
101447	M21305		gb:Human alpha satellite and satellite 3	13.8
113009	T23699	Hs.7246	ESTs	12.5
126947	Z40778	Hs.191837	ESTs	11.4
100893	BE245294	Hs.180789	S164 protein	11.1
101050	AU077324	Hs.1832	neuropeptide Y	11.0
132114	NM_006152	Hs.40202	lymphoid-restricted membrane protein	10.7

5	101304	AA001021	Hs.6685	thyroid hormone receptor interactor 8	10.4
	105687	AA767528	Hs.22030	paired box gene 5 (B-cell lineage specific)	9.1
	112727	T91029	Hs.15069	ESTs	9.0
	109788	T79971	Hs.12432	Homo sapiens clone 24407 mRNA sequence	8.7
	113374	T79925	Hs.269165	ESTs, Weakly similar to ALU1_HUMAN ALU S	7.8
	130466	W19744	Hs.180059	Homo sapiens cDNA FLJ20553 fs, clone KA	7.7
	109384	AA219172	Hs.86849	ESTs	7.6
	112602	AW004045	Hs.203365	ESTs	6.6
10	125278	AI218439	Hs.129998	enhancer of polycomb 1	6.5
	112167	N99591	Hs.25587	ESTs, Weakly similar to T00329 hypothetical	6.4
	116355	AA789133	Hs.88650	ESTs	5.8
	123440	AI733692	Hs.112488	ESTs	5.5
	100918	AK001335	Hs.31137	protein tyrosine phosphatase, receptor type 1	5.4
15	101879	AA176374	Hs.243886	nuclear autoantigenic sperm protein (h)	5.4
	109260	AW978515	Hs.131915	KIAA0863 protein	5.4
	129213	AI146494	Hs.109525	ESTs, Weakly similar to IRX2_HUMAN IROQU	5.4
	120809	AA346495		gb:EST52657 Fetal heart II Homo sapiens	5.4
	105498	H68279	Hs.24937	transformer-2 alpha (htra-2 alpha)	5.1
20	114840	AA447591	Hs.87359	ESTs, Highly similar to RB18_HUMAN RAS-R	5.0
	103304	BE561801	Hs.2484	T-cell leukemia/lymphoma 1A	4.9
	113983	W87415	Hs.55298	HLA-B associated transcript-1	4.8
	115844	AI373062	Hs.332938	hypothetical protein MGC5370	4.8
	120712	AF183339	Hs.102506	eukaryotic translation initiation factor	4.8
25	107794	AA019255		gb:ce56e10.a1 Soares retina N2b4HR Homo	4.7
	135101	U82275	Hs.94498	leukocyte immunoglobulin-like receptor,	4.6
	129898	AI872731	Hs.13258	ESTs	4.6
	113494	T91451	Hs.86538	ESTs	4.6
	115004	AA325340	Hs.4857	mannosyl (alpha-1,3)-glycoprotein beta-	4.5
30	113074	AK001335	Hs.31137	protein tyrosine phosphatase, receptor type 1	4.5
	112326	R55822	Hs.4268	ESTs	4.4
	105169	BE245294	Hs.180789	S164 protein	4.4
	117048	H89732	Hs.230113	EST	4.3
	123133	AA487284	Hs.154974	Homo sapiens mRNA; cDNA DKFZp667N064 (f)	4.3
35	111394	AA412227	Hs.16131	hypothetical protein FLJ12876	4.3
	106112	AL117518	Hs.3686	KIAA0978 protein	4.2
	114414	AW152166	Hs.182113	ESTs	4.2
	125219	AI804331	Hs.99423	ATP-dependent RNA helicase	4.2
	114995	AA769266	Hs.193657	ESTs	4.2
40	123338	AA504249	Hs.187585	ESTs	4.1
	126666	AA648888	Hs.151999	ESTs	4.1
	112908	BE281000	Hs.3530	TLS-associated serine-arginine protein 2	4.1
	116640	X89984	Hs.211563	B-cell CLL/lymphoma 7A	4.0
	109292	AW975746	Hs.188662	KIAA1702 protein	4.0
45	131724	AK001335	Hs.31137	protein tyrosine phosphatase, receptor type 1	4.0
	119772	AJ250839	Hs.58241	gene for serine/threonine protein kinase	4.0
	134453	AJ272141	Hs.83484	SRY (sex determining region Y)-box 4	4.0
	123582	AA177088	Hs.190065	ESTs	4.0
	103226	X75042	Hs.44313	v-rel avian reticuloendotheliosis viral	3.9
50	127610	AA980867	Hs.150271	ESTs, Highly similar to unnamed protein	3.9
	119873	AI860149	Hs.44865	lymphoid enhancer-binding factor 1	3.9
	115553	AJ275986	Hs.71414	transcription factor (SMIF gene)	3.9
	131844	AJ419294	Hs.324342	ESTs	3.8
	123360	AA532718	Hs.178604	ESTs	3.8
55	111180	AI798851	Hs.283108	hemoglobin, gamma G	3.8
	129426	AF077953	Hs.111323	Protein inhibitor of activated STAT X	3.8
	105434	AA252111	Hs.15200	ESTs	3.8
	119073	BE245360	Hs.279477	ESTs	3.8
	127003	AW816515	Hs.173540	ATPase, Class V, type 10D	3.7
60	118325	TS1138	Hs.90489	ESTs	3.7
	115998	AA448488	Hs.336629	ribosomal protein L44	3.7
	119830	AW054922	Hs.53478	Homo sapiens cDNA FLJ12366 fs, clone MA	3.7
	104584	AA704538	Hs.193777	ESTs	3.6
	105212	AA205334	Hs.324278	Homo sapiens mRNA; cDNA DKFZp566M063 (f)	3.6
65	109223	AW000714	Hs.65818	ESTs	3.6
	112605	R79374	Hs.29852	ESTs	3.5
	105733	AA767669	Hs.10242	ESTs	3.5
	120562	BE244580	Hs.302267	hypothetical protein FLJ10330	3.5
	112268	W39609	Hs.22003	solute carrier family 6 (neurotransmitter)	3.5
70	127834	AW301022	Hs.337631	EST	3.5
	115147	AA745781	Hs.38399	hypothetical protein MGC2454	3.5
	115185	BE299677	Hs.105461	hypothetical protein FLJ20357	3.5
	113921	AW976530	Hs.28355	hypothetical protein FLJ22402	3.5
	115835	AA521410	Hs.41371	ESTs	3.5
75	123503	AW975051	Hs.293156	ESTs, Weakly similar to I78885 serine/th	3.5
	128527	AA504583	Hs.101047	transcription factor 3 (E2A immunoglobulin)	3.4
	128743	RA4284	Hs.2730	heterogeneous nuclear ribonucleoprotein	3.4
	117031	H88353		gb:vw21a02.s1 Marton Fetal Cochlea Homo	3.4
	123149	AI734179	Hs.105676	ESTs	3.4
80	102581	AU077228	Hs.77258	enhancer of zeste (Drosophila) homolog 2	3.4
	103158	BE242587	Hs.118651	hematopoietically expressed homeobox	3.4
	107599	AW664072	Hs.60136	ESTs	3.4
	125556	AB033064	Hs.334806	KIAA1238 protein	3.4
	103331	AI825463	Hs.147996	protein kinase, X-linked	3.4

5	114387	AI655141	Hs.107720	ESTs, Weakly similar to A54295 Interfer	3.4
	119040	R02394	Hs.269435	ESTs, Moderately similar to PC4259 ferri	3.4
	100305	NM_004941	Hs.171872	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	3.4
	129818	T71092	Hs.172572	hypothetical protein FLJ20093	3.3
	133445	AC005262	Hs.73797	guanine nucleotide binding protein (G pr	3.3
	132111	AW500857	Hs.40137	anaphase-promoting complex 1; meiotic ch	3.3
	105292	AF128542	Hs.166846	polymerase (DNA directed), epsilon	3.3
	118397	BE139479	Hs.161492	ESTs	3.3
10	118922	AW206193	Hs.91065	hypothetical protein DKFZp761B2423	3.2
	132344	AW977189	Hs.45719	KIAA0823 protein	3.2
	129889	AA810932	Hs.131899	ESTs, Weakly similar to T00370 hypotheti	3.2
	123670	AI189844	Hs.112708	ESTs, Moderately similar to ZN91_HUMAN Z	3.2
	116291	AW410377	Hs.41502	hypothetical protein FLJ21276	3.2
15	105289	AB020638	Hs.103000	KIAA0831 protein	3.2
	105583	AA278907	Hs.3530	TLS-associated serine-arginine protein	3.2
	104796	BE620712	Hs.33026	hypothetical protein PP2447	3.2
	111657	R07364	Hs.268667	ESTs, Weakly similar to ALU1_HUMAN ALU	3.2
	134174	AF283770	Hs.79530	CD79A antigen (immunoglobulin-associated	3.2
20	126077	M78772	Hs.210836	ESTs	3.1
	133733	AK000476	Hs.75798	hypothetical protein	3.1
	124847	W07701	Hs.304177	Homo sapiens clone FLB8503 PRO2266 mRNA,	3.1
	127879	AA768098	Hs.189079	ESTs	3.1
	113108	AW516695	Hs.8438	ESTs	3.1
25	110343	AW138703	Hs.17268	ESTs	3.1
	102935	BE561850	Hs.80506	small nuclear ribonucleoprotein polypept	3.1
	111676	AB040882	Hs.109778	KIAA1449 protein	3.1
	127311	AA492582	Hs.322404	hypothetical protein MGC4175	3.1
	108830	AA131743	Hs.193352	ESTs	3.1
30	111330	BE247767	Hs.18166	KIAA0870 protein	3.1
	104246	AF016032	Hs.201377	lysosomal aspartase-like 1	3.1
	126668	AA011616	Hs.269877	ESTs	3.1
	124724	H20816	Hs.112423	Homo sapiens mRNA; cDNA DKFZp586i1420 (f	3.1
	114794	AI751157	Hs.101395	hypothetical protein MGC11352	3.1
35	134599	X99226	Hs.284153	Fanconi anemia, complementation group A	3.0
	130314	NM_014674	Hs.154332	KIAA0212 gene product	3.0
	100265	D38521	Hs.112396	KIAA0077 protein	3.0
	115005	AI760825	Hs.111339	ESTs	3.0
	123433	AW450922	Hs.112478	ESTs	3.0
40	127798	AA737068	Hs.294078	ESTs	3.0
	117403	H84455	Hs.40639	ESTs	3.0
	107111	AI298448	Hs.22870	chromodomain helicase DNA binding protei	3.0
	105698	AW957300	Hs.294142	ESTs, Weakly similar to C55663 oligodend	3.0
	108358	M81833	Hs.1634	cell division cycle 25A	3.0
45	132066	AI929392	Hs.181195	DnaJ (Hsp40) homolog, subfamily B, membe	2.9
	130303	BE245284	Hs.180789	S164 protein	2.9
	104596	AF067804	Hs.15423	hypothetical protein HDCMC04P	2.9
	112197	NM_003655	Hs.5637	ESTs	2.9
	132809	AF036144	Hs.5734	meningioma expressed antigen 5 (hyaluron	2.9
50	100877	X80821	Hs.27973	KIAA0874 protein	2.9
	108147	AI972094	Hs.286221	Homo sapiens cDNA FLJ13741 fs, clone PL	2.9
	133674	AW851121	Hs.75497	Homo sapiens cDNA: FLJ22139 fs, clone H	2.9
	129001	AA443323	Hs.107812	6POZ protein	2.9
	131920	BE002320	Hs.287864	Homo sapiens cDNA FLJ14030 fs, clone HE	2.9
55	134709	NM_006290	Hs.211600	tumor necrosis factor, alpha-induced pro	2.8
	113577	AI300699	Hs.278937	PRO0470 protein	2.8
	115839	BE300266	Hs.28935	transducin-like enhancer of split 1, hom	2.8
	129969	N57818		gb:yy59d07.s1 Soares fetal liver spleen	2.8
	128859	AW630087	Hs.103315	truncleotide repeat containing 1	2.8
60	105011	BE091826	Hs.16244	mitotic spindle coiled-coil related prot	2.8
	129294	AF172940	Hs.184542	CGI-127 protein	2.8
	104518	H20816	Hs.112423	Homo sapiens mRNA; cDNA DKFZp586i1420 (f	2.7
	107796	AA058848	Hs.60797	ESTs	2.7
	106331	AB037742	Hs.24336	KIAA1321 protein	2.7
65	127692	AI021912	Hs.187983	ESTs	2.7
	131916	AA025978	Hs.34569	ESTs	2.7
	124971	T23800	Hs.151001	hypothetical protein FLJ14728	2.7
	129428	AA256906	Hs.111384	ESTs, Weakly similar to ubiquitous TPR m	2.7
	118348	AW408588	Hs.91052	ESTs, Moderately similar to ALU5_HUMAN A	2.7
70	113219	T59257	Hs.269528	ESTs, Moderately similar to ALU8_HUMAN A	2.7
	131720	Z68128	Hs.3109	Rho GTPase activating protein 4	2.7
	109593	AW196801	Hs.6585	thyroid hormone receptor interactor 8	2.7
	135359	AF043722	Hs.99491	RAS guanyl releasing protein 2 (calcium	2.7
	131689	AB012124	Hs.30696	transcription factor-like 5 (basic helix	2.7
75	117457	N29882	Hs.44071	ESTs, Weakly similar to ALU5_HUMAN ALU	2.7
	121073	H48199	Hs.112184	DKFZP586J0619 protein	2.7
	125069	H81306	Hs.194485	ESTs	2.7
	116456	AI381911	Hs.334859	KIAA1814 protein	2.7
	124271	AW293223	Hs.6926	hypothetical protein FLJ20291	2.7
80	112369	AW966243	Hs.4243	hypothetical protein FLJ12650	2.7
	115866	AW062629	Hs.52081	KIAA0867 protein	2.7
	132543	BE568452	Hs.5101	protein regulator of cytokinesis 1	2.7
	124494	N54831	Hs.271381	ESTs, Weakly similar to I38022 hypothet	2.7
	104799	AA029703		gb:zz55i08.s1 Soares_fetal_heart_NbHH19W	2.7

	120510	AJ795395	Hs.111377	ESTs	2.6
	129781	AA306090	Hs.124707	ESTs	2.6
	122698	AA456112	Hs.99410	ESTs	2.6
	106995	AB023139	Hs.37892	KIAA0922 protein	2.6
5	105502	BE464016	Hs.238958	ESTs	2.6
	128671	AI885045	Hs.211586	phosphoinositide-3-kinase, regulatory s	2.6
	107059	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E. coli Re	2.6
	125502	T10077	Hs.13453	hypothetical protein FLJ14753	2.6
10	129703	BE388665	Hs.179999	Homo sapiens, clone IMAGE:3457003, mRNA	2.6
	111219	N68836	Hs.19247	ESTs, Moderately similar to ALUC_HUMAN	2.6
	133529	W45623	Hs.74571	ADP-ribosylation factor 1	2.6
	125826	AI038854	Hs.180789	S164 protein	2.6
	111189	N57603	Hs.272130	ESTs, Weakly similar to S65824 reverse	2.6
	113146	BE151985	Hs.5722	hypothetical protein FLJ23318	2.6
15	125562	AI494372	Hs.98968	hypothetical protein FLJ23058	2.6
	102263	U29171	Hs.75852	casein kinase 1, delta	2.6
	118835	AA535246	Hs.50852	ESTs	2.6
	103141	X66113	Hs.75584	polymyositis/scleroderma autoantigen 2 (	2.6
20	109599	R40515	Hs.21248	ESTs	2.6
	127262	AA828125		gb:cd71a09.s1 NCL_CGAP_Ov2 Homo sapiens	2.6
	129620	D79338	Hs.239720	CCR4-NOT transcription complex, subunit	2.6
	125905	AI878638	Hs.6456	chaperonin containing TCP1, subunit 2 (b	2.6
	123255	AA830335	Hs.105273	ESTs	2.6
25	133160	N54968	Hs.66309	hypothetical protein MGC11051	2.6
	109638	AW977747	Hs.119120	E3 ubiquitin ligase SMURF1	2.6
	119896	AA731836	Hs.137319	ESTs	2.6
	134770	M89957	Hs.89575	CD79B antigen (immunoglobulin-associated	2.6
	119403	AL117554	Hs.119908	nucleolar protein NOPS/NOP58	2.6
30	129563	AF119664	Hs.27299	transcriptional regulator protein	2.6
	111719	AI655806	Hs.179262	ESTs	2.6
	103982	AA218558	Hs.7905	sorting nexin 9	2.6
	125032	T74884		gb:yc58d02.s1 Stratagene liver (937224)	2.5
	131428	AL122045	Hs.26703	CCR4-NOT transcription complex, subunit	2.5
35	131938	AF176085	Hs.34956	neural polypyrimidine tract binding prot	2.5
	102450	U48251	Hs.75871	protein kinase C binding protein 1	2.5
	133761	AF041430	Hs.75922	brain protein 13	2.5
	126339	AA152106	Hs.4859	cyclin L, alpha-6a	2.5
	118967	AI668670	Hs.216756	ESTs	2.5
40	123110	AA486256	Hs.193510	EST	2.5
	114092	H81213	Hs.14825	ESTs, Weakly similar to KIAA1503 protein	2.5
	113247	T63856	Hs.193430	ESTs, Weakly similar to 2109260A B cell	2.5
	122024	AA431296	Hs.139433	ESTs	2.5
	106657	AW854339	Hs.33476	hypothetical protein FLJ11937	2.5
45	126127	N95428		gb:zb80d09.s1 Soares_senescent_fibroblas	2.5
	111836	R58394	Hs.25119	ESTs, Weakly similar to YEX0_YEAST HYPOT	2.5
	121470	AA558958	Hs.324751	ESTs	2.5
	120132	W57554	Hs.125019	ESTs	2.5
	107731	AA016088	Hs.272106	ESTs, Weakly similar to I38022 hypotheti	2.5
50	118122	AI186671	Hs.48008	ESTs	2.5
	106589	AK000933	Hs.28561	Homo sapiens cDNA FLJ10071 fs, clone HE	2.5
	129948	AI537162	Hs.263988	ESTs	2.5
	115652	BE093589	Hs.38178	hypothetical protein FLJ23468	2.5
55	103076	NM_001034	Hs.75319	ribonucleotide reductase M2 polypeptide	2.5
	131019	W28514	Hs.306155	chorionic somatomammotropin hormone 1 (p	2.5
	100512	D13317	Hs.78915	GA-binding protein transcription factor,	2.5
	105393	AF167570	Hs.256583	interleukin enhancer binding factor 3, 9	2.5
	100571	L14561	Hs.78548	ATPase, Ca++ transporting, plasma membra	2.6
60	106890	AA489245	Hs.88500	mitogen-activated protein kinase 8 Intra	2.5
	104276	AW965275	Hs.284288	hsp0256 protein	2.5
	113283	T68813	Hs.12947	EST	2.5
	118078	N54321	Hs.47790	EST	2.5
	120796	AI247356	Hs.96820	ESTs	2.5
	106265	AA412178	Hs.236463	Homo sapiens mRNA; cDNA DKFZp586i0521 (I	2.5
65	102507	U52154	Hs.193044	potassium inwardly-rectifying channel, s	2.5
	106508	AI205785	Hs.30348	ESTs	2.5
	104568	AW629981	Hs.172182	poly(A)-binding protein, cytoplasmic 1	2.5
	103698	AA001021	Hs.6685	thyroid hormone receptor interactor 8	2.5
70	113947	W84768		gb:zh53d03.s1 Soares_fetal_liver_spleen_	2.5
	132112	AL021938	Hs.40154	jumonji (mouse) homolog	2.5
	129052	BE275031	Hs.158210	hypothetical protein MGC2555	2.4
	117265	AA451966	Hs.43005	RAB9-like protein	2.4
	107834	AA253162	Hs.40838	ESTs	2.4
	113119	T47910		gb:zb18b11.s1 Stratagene fetal spleen (9	2.4
75	133726	AI803188	Hs.252716	oxysterol-binding protein-related protei	2.4
	120548	AA280356	Hs.187634	ESTs	2.4
	121545	AA412442	Hs.88132	ESTs	2.4
	131136	AB033099	Hs.23413	KIAA1273 protein	2.4
	126589	AW027809	Hs.187698	Homo sapiens cytomegalovirus partial fus	2.4
80	116475	AB033085	Hs.40193	hypothetical protein KIAA1259	2.4
	103760	AA642973	Hs.183842	ubiquitin B	2.4
	127889	AI147408	Hs.144941	ESTs	2.4
	124457	AK000680	Hs.266175	phosphoprotein associated with GEMs	2.4
	113721	AF143885	Hs.18190	EST	2.4

	129079	AK000157	Hs.108502	hypothetical protein FLJ20150	2.4
	123530	AA608705	Hs.187772	ESTs	2.4
	123592	AA605331	Hs.112637	ESTs	2.4
5	113474	R50752	Hs.23856	hypothetical protein MGC5297	2.4
	116728	F13687	Hs.227976	EST	2.4
	101759	M80244	Hs.184601	solute carrier family 7 (cationic amino	2.4
	131686	NM_012296	Hs.30687	GRB2-associated binding protein 2	2.4
	127841	AW136558	Hs.125246	ESTs	2.4
10	102737	R51790	Hs.239483	Human clone 23933 mRNA sequence	2.4
	129673	D38552	Hs.1191	KIAA0073 protein	2.4
	133095	BE048490	Hs.180677	zinc finger protein 162	2.4
	124540	N63232		gb:z39a12.s1 Morton Fetal Cochlea Homo	2.4
	113609	T93263	Hs.16875	ESTs, Weakly similar to S23650 retrovir	2.4
15	128826	Z40313	Hs.106330	Homo sapiens clone IMAGE:23371, mRNA seq	2.4
	129059	AW069534	Hs.279583	CGI-81 protein	2.4
	134092	AA218558	Hs.7905	sorting nexin 9	2.4
	132317	BE262438	Hs.44592	beta-1,4 mannosyltransferase	2.4
	135278	AA399542	Hs.229871	EST, Moderately similar to PEPTIDYL-PROL	2.4
20	128468	T23625	Hs.150580	putative translation initiation factor	2.4
	127407	AW089514	Hs.279681	heterogeneous nuclear ribonucleoprotein	2.4
	132342	AW162758	Hs.45232	ESTs, Weakly similar to ALU5_HUMAN ALU S	2.4
	113518	AW367788	Hs.323954	postmeiotic segregation increased 2-lik	2.4
	100330	AW410976	Hs.77152	mitochondrial maintenance deficient (S.	2.4
25	116046	BE395293	Hs.94491	hypothetical protein FLJ20297	2.4
	123910	AA621262	Hs.179923	ESTs, Weakly similar to S65657 alpha-1C-	2.4
	101651	AL037111	Hs.75841	galactose-1-phosphate uridylyltransferas	2.4
	100114	X02308	Hs.82962	thymidylate synthetase	2.4
	125038	AA812234	Hs.270134	hypothetical protein FLJ20280	2.4
30	135191	X18866	Hs.301086	cytochrome P450, subfamily 11D (debrisoq	2.4
	123258	AA490929	Hs.105274	ESTs, Weakly similar to RMS1_HUMAN REGUL	2.4
	132380	AW373665	Hs.46853	ESTs	2.4
	114046	BE018658	Hs.141003	Homo sapiens cDNA: FLJ21691 fls, clone C	2.3
	133582	BE391579	Hs.75087	Fas-activated serine/threonine kinase	2.3
35	134839	D63479	Hs.115907	diacylglycerol kinase, delta (130kD)	2.3
	105734	AI952797	Hs.10888	hypothetical protein FLJ21709	2.3
	101086	AA382524	Hs.250959	histatin 1	2.3
	118349	N63786	Hs.94149	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.3
	101194	L20971	Hs.188	phosphodiesterase 4B, cAMP-specific (dun	2.3
40	130588	AL030996	Hs.16411	hypothetical protein LOC57187	2.3
	101876	BE241753	Hs.74592	special AT-rich sequence binding protein	2.3
	118751	N74210	Hs.50454	ESTs	2.3
	125174	W51835	Hs.231082	EST	2.3
	105986	AA142984	Hs.5344	adaptor-related protein complex 1, gamma	2.3
45	104624	AA353126	Hs.184721	ESTs	2.3
	131263	AU077002	Hs.24950	regulator of G-protein signalling 5	2.3
	105014	AA121123	Hs.269267	ESTs, Weakly similar to AF161361 1 HSPC	2.3
	123423	AA598484		gb:aa38f04.s1 Gessler Wilms tumor Homo s	2.3
	128531	H03721	Hs.2953	ribosomal protein S15a	2.3
50	108876	AI733860	Hs.191463	ESTs	2.3
	130215	BE301883	Hs.152707	glioblastoma amplified sequence	2.3
	132232	AI522273	Hs.42640	ESTs	2.3
	132664	AI740461	Hs.54542	ESTs	2.3
	105991	AA215701	Hs.186541	ESTs, Weakly similar to I38022 hypotheti	2.3
55	100253	D38024	Hs.157425	double homeobox, 2	2.3
	105574	AA045281	Hs.268175	phosphoprotein associated with GEMs	2.3
	100780	BE561958	Hs.302063	immunoglobulin heavy constant mu	2.3
	134964	AI803516	Hs.272891	hippocampin-like protein 4	2.3
	132786	BE083422	Hs.56851	hypothetical protein MGC2668	2.3
60	104952	AW076098	Hs.74316	desmoplakin (DPI, DPII)	2.3
	119127	AA708035	Hs.12248	ESTs	2.3
	104857	AI920902	Hs.18058	ESTs, Moderately similar to S65657 alpha	2.3
	107592	AA694264	Hs.60049	ESTs	2.3
	113378	T80738	Hs.14757	ESTs	2.3
65	129228	U40714	Hs.239307	tyrosyl-tRNA synthetase	2.3
	106898	AA490069	Hs.306676	Homo sapiens cDNA FLJ14302 fls, clone PL	2.3
	130734	AW137091	Hs.18624	KIAA1052 protein	2.3
	125728	AW954565	Hs.57987	B-cell CLL/lymphoma 11B (zinc finger pro	2.3
	113697	T97183	Hs.17992	Homo sapiens mRNA: cDNA DKFZp434J1726 (f	2.3
70	107104	AU076840	Hs.15243	nucleolar protein 1 (120kD)	2.3
	134267	AI174596	Hs.196209	RAE1 (RNA export 1, S.pombe) homolog	2.3
	105777	R42755	Hs.23096	ESTs	2.3
	115306	AA280288	Hs.88746	ESTs	2.3
	133363	AI866286	Hs.71962	ESTs, Weakly similar to B36298 proline-r	2.3
75	129535	AA397972	Hs.169965	chimerin (chimaerin) 1	2.3
	121520	AA412163	Hs.164785	ESTs	2.3
	123808	AA620552		gb:ae58g11.s1 Stratagene lung carcinoma	2.3
	105700	AW580830	Hs.35254	hypothetical protein FLB6421	2.3
	120820	AA347417	Hs.96869	EST	2.3
	128721	AW403911	Hs.268175	phosphoprotein associated with GEMs	2.3
80	107711	W96141	Hs.220687	ESTs	2.3
	102564	U58423	Hs.79087	MAD (mothers against decapentaplegic, Dr	2.3
	131868	AW408296	Hs.33532	zinc finger protein 151 (pH2-67)	2.3
	122333	AA625872	Hs.98977	ESTs, Moderately similar to T34561 hypot	2.3

5	118865	AA736405	Hs.54530	ESTs	2.3
	128952	AL043463	Hs.6755	RaP2 interacting protein 8	2.3
	133772	BE378867	Hs.76038	isopentenyl-diphosphate delta isomerase	2.3
	111795	AI435437	Hs.24567	ESTs, Weakly similar to KBF3_HUMAN NUCLE	2.3
	103437	AV655598	Hs.184211	peptidase (mitochondrial processing) bet	2.3
	123060	AA482027	Hs.142569	ESTs, Weakly similar to I38022 hypothet	2.3
	125466	R08234	Hs.180461	ESTs	2.3
	100892	BE245294	Hs.180789	S164 protein	2.3
10	121613	AA416879	Hs.193195	ESTs, Weakly similar to 2109260A B cell	2.3
	133655	AL036883	Hs.75450	delta sleep inducing peptide, immunoreac	2.2
	129248	W04606	Hs.171637	hypothetical protein MGC2628	2.2
	128153	H85692	Hs.40730	ESTs	2.2
	125590	R23858	Hs.143375	Homo sapiens, clone IMAGE:3840937, mRNA,	2.2
15	104960	AA558677	Hs.8928	hypothetical protein FLJ20291	2.2
	113941	AA531016	Hs.22399	hypothetical protein FLJ14824	2.2
	112540	R69751		gb:Y40a10.s1 Soares placenta Nb2HP Homo	2.2
	105322	T87179	Hs.16346	ESTs, Weakly similar to S57447 HPBRU-7	2.2
20	112003	AW978731	Hs.301824	hypothetical protein PRD1331	2.2
	134733	N87353	Hs.69421	CBF1 interacting corepressor	2.2
	114620	AA642974		gb:mr60h01.s1 NCL_CGAP_Lym3 Homo sapiens	2.2
	123451	A1793211	Hs.165372	ESTs, Moderately similar to ALU1_HUMAN A	2.2
	130850	AB040922	Hs.20237	DKFZP566C134 protein	2.2
	105561	AA262881	Hs.323835	ESTs, Weakly similar to alternatively s	2.2
25	125957	H41694		gb:yo06b06.r1 Soares adult brain Nb25HB5	2.2
	130362	BE513050	Hs.279681	heterogeneous nuclear ribonucleoprotein	2.2
	122682	AA984531	Hs.159293	ESTs	2.2
	124250	AA350256	Hs.323675	EST, Weakly similar to 2109260A B cell	2.2
	131392	AA235153	Hs.26320	TRABID protein	2.2
30	128845	AW503976	Hs.10849	basement membrane-induced gene	2.2
	130453	U80735	Hs.173854	PAX transcription activation domain inte	2.2
	126973	W46653	Hs.251928	nuclear pore complex interacting protein	2.2
	103156	BE259039	Hs.129953	Ewing sarcoma breakpoint region 1	2.2
35	103163	AU077018	Hs.3235	keratin 4	2.2
	109262	BE440157	Hs.85944	ESTs	2.2
	131163	AA099524	Hs.23754	ESTs	2.2
	115292	AA279956	Hs.88672	ESTs	2.2
	122591	A188219	Hs.99311	ESTs, Weakly similar to HSJ2_HUMAN DNAB	2.2
40	124977	F04819	Hs.190452	KIAA0365 gene product	2.2
	103319	X83492	Hs.82359	tumor necrosis factor receptor superfam	2.2
	100370	D79989	Hs.184884	KIAA0167 gene product	2.2
	128992	H04150	Hs.107708	ESTs	2.2
	129928	AI338993	Hs.134535	ESTs	2.2
45	108451	AA079195		gb:zm92h12.s1 Stratagene ovarian cancer	2.2
	133910	AW835281	Hs.77500	ubiquitin specific protease 4 (proto-onc	2.2
	106288	AB037742	Hs.24336	KIAA1321 protein	2.2
	134125	NM_014781	Hs.50421	KIAA0203 gene product	2.2
	101379	X02994	Hs.1217	adenosine deaminase	2.2
50	112276	RS3442	Hs.26038	ESTs, Weakly similar to I38022 hypothet	2.2
	106251	R12607	Hs.35101	proline-rich G1a (G-carboxyglutamic acid	2.2
	125384	BE178502	Hs.173772	ESTs, Weakly similar to I78885 serine/th	2.2
	103392	X94563		gb:H.sapiens db/accp gene exon 1 & 2.	2.2
	112653	T02843		gb:FB11H5 Fetal brain, Stratagene Homo s	2.2
55	133195	AI434760	Hs.279949	KIAA1007 protein	2.2
	135050	AK001887	Hs.259842	protein kinase, AMP-activated, gamma 2 n	2.2
	131381	M92842	Hs.26208	collagen, type XVI, alpha 1	2.2
	134104	L35253	Hs.79107	mitogen-activated protein kinase 14	2.2
	105225	AA211777		gb:zm57d02.s1 Stratagene muscle 937209 H	2.2
60	131320	AA505691	Hs.145696	splicing factor (CC1.3)	2.2
	114419	AI248013	Hs.106532	ESTs, Weakly similar to I38588 reverse t	2.2
	103634	BE541733	Hs.180877	H3 histone, family 3B (H3.3B)	2.2
	134624	AF035119	Hs.8700	deleted in liver cancer 1	2.2
	126524	Z45455	Hs.182447	heterogeneous nuclear ribonucleoprotein	2.2
65	115556	AL031778	Hs.797	nuclear transcription factor Y, alpha	2.2
	111898	R38944	Hs.183475	Homo sapiens clone 25081 mRNA sequence	2.2
	100415	D86970	Hs.75822	TGFB1-induced anti-apoptotic factor 1	2.2
	103898	AA248884		gb:k3517.seq.F Human fetal heart, Lambda	2.2
	125501	AI631811	Hs.180403	STRIN protein	2.2
70	127251	AA938428	Hs.128638	ESTs	2.2
	100613	X52078	Hs.101047	transcription factor 3 (E2A immunoglobul	2.2
	116332	AA491208	Hs.62620	chromosome 6 open reading frame 1	2.2
	128897	AW979134	Hs.10700	hypothetical protein	2.2
	111777	AK001100	Hs.41690	dasmocollin 3	2.2
	128604	AI879099	Hs.102397	GIOT-3 for gonadotropin inducible transc	2.2
75	125585	AW298113	Hs.92809	SON DNA binding protein	2.2
	129584	AV656017	Hs.184325	CGI-76 protein	2.2
	114461	AA531187	Hs.126705	ESTs	2.2
	121387	AA405854		gb:zu66g08.s1 Soares_lectia_NHT Homo sap	2.2
80	109339	AA314554	Hs.27774	ESTs, Highly similar to AF161349 1 HSPC0	2.2
	129179	AW969025	Hs.109154	ESTs	2.2
	106711	BE390125	Hs.143187	hypothetical protein	2.2
	106424	H61005	Hs.37902	ESTs	2.2
	123949	AA621665	Hs.208957	EST	2.2
	127256	AI738610	Hs.267957	ESTs, Moderately similar to ALU8_HUMAN	2.2



	104868	AF173867	Hs.28906	glucocorticoid modulatory element bindin	2.2
	132984	BE539199	Hs.62112	zinc finger protein 207	2.2
	126383	AB032977	Hs.6298	KIAA1151 protein	2.2
5	130557	H51825	Hs.268911	ESTs, Weakly similar to S65824 reverse	2.2
	119232	AI855226	Hs.117659	ESTs, Weakly similar to T46481 hypotheti	2.2
	105715	BE621800	Hs.29444	putative small membrane protein NID67	2.2
	124691	R05835	Hs.110153	ESTs	2.2
	113649	N94768	Hs.16400	ESTs, Weakly similar to KIAA1435 protein	2.2
10	117040	AW970600	Hs.303261	ESTs	2.2
	128767	M85169	Hs.1050	pleckstrin homology, Sec7 and coiled/coi	2.2
	120602	AA808018	Hs.109302	ESTs	2.2
	107182	AJ311782	Hs.20013	GICP-interacting protein p29	2.2
	107357	U63973	Hs.103501	rhodopsin kinase	2.2
15	125499	H10543		gb:ym04c08.r1 Soares infant brain 1N18 H	2.1
	126872	AW450979		gb:U1-H-813-ala-a-12-0-U1.s1 NCLCGAP_Su	2.1
	113233	T61955	Hs.279867	CGI-59 protein	2.1
	128367	AW611791	Hs.150742	ESTs	2.1
	127432	AW067708	Hs.170311	heterogeneous nuclear ribonucleoprotein	2.1
20	114021	AW235215	Hs.16145	ESTs	2.1
	104455	AL110261	Hs.157211	DKFZP586B0621 protein	2.1
	134966	AW402389	Hs.920	modulator recognition factor I	2.1
	129765	M86933	Hs.1238	amelogenin (Y chromosome)	2.1
	133461	NM_000762	Hs.334345	cytochrome P450, subfamily 11A (phenobar	2.1
25	109639	AA082650	Hs.6217	Homo sapiens cDNA FLJ112521 fis, clone NT	2.1
	129794	AF181399	Hs.23259	hypothetical protein FLJ13433	2.1
	134869	AL157518	Hs.90421	PRO2463 protein	2.1
	110256	H63947	Hs.237955	RAB7, member RAS oncogene family	2.1
	128817	BE395776	Hs.168640	ankylosis, progressive (mouse) homolog	2.1
30	120906	NM_000734	Hs.97087	CD3Z antigen, zeta polypeptide (TIT3 com	2.1
	134354	M90391	Hs.82127	Interleukin 16 (lymphocyte chemoattracta	2.1
	106048	AW883367	Hs.301732	hypothetical protein MGC5306	2.1
	128352	AW137413	Hs.169942	ESTs	2.1
	115348	AA281562	Hs.292100	ESTs	2.1
35	123474	AA599209		gb:ag34b11.s1 Jia bone marrow stroma Hom	2.1
	107121	AB015427	Hs.250493	zinc finger protein 219	2.1
	118509	N22617	Hs.43228	Homo sapiens cDNA FLJ11835 fis, clone HE	2.1
	135051	AJ272141	Hs.83484	SRY (sex determining region Y)-box 4	2.1
	109442	AW296134	Hs.86999	ESTs, Weakly similar to S65657 alpha-1C-	2.1
40	126661	AA009835	Hs.269521	ESTs	2.1
	129270	AA357185	Hs.109918	ras homolog gene family, member H	2.1
	125568	AW615398	Hs.105613	ESTs	2.1
	132867	AF226667	Hs.58553	CTP synthase II	2.1
	124656	AW297702	Hs.102915	ESTs	2.1
45	128954	AA346839	Hs.209100	DKFZP434C171 protein	2.1
	132985	AL045579	Hs.62113	KIAA0717 protein	2.1
	119247	BE269047	Hs.65234	hypothetical protein FLJ20596	2.1
	106688	N66397	Hs.334825	Homo sapiens cDNA FLJ14752 fis, clone NT	2.1
	131009	AF169802	Hs.22142	cytochrome b5 reductase b5R.2	2.1
50	112170	BE246743	Hs.288529	hypothetical protein FLJ22635	2.1
	130755	BE293520	Hs.18910	prostate cancer overexpressed gene 1	2.1
	117357	N24829		gb:yx98h12.s1 Soares melanocyte 2NbHM Ho	2.1
	101613	M24283	Hs.168383	intercellular adhesion molecule 1 (CD54)	2.1
	127844	N88858	Hs.155101	ATP synthase, H+ transporting, mitochond	2.1
55	101183	AA442324	Hs.795	H2A histone family, member O	2.1
	100420	D86983	Hs.118893	Melanoma associated gene	2.1
	129879	AK001898	Hs.13109	Ran binding protein 11	2.1
	122311	NM_014913	Hs.131915	KIAA0863 protein	2.1
	130666	R85474	Hs.16073	ESTs	2.1
60	113517	AI874223	Hs.293560	ESTs	2.1
	115810	AA426026	Hs.187615	ESTs	2.1
	108743	AI580150	Hs.71074	ESTs	2.1
	129255	AI961727	Hs.109804	H1 histone family, member X	2.1
	120768	AA764879	Hs.12570	tubulin-specific chaperone d	2.1
65	126893	AJ252060	Hs.26320	TRABID protein	2.1
	115254	AA279024	Hs.269316	ESTs, Weakly similar to S65657 alpha-1C	2.1
	105865	BE279383	Hs.26557	plakophilin 3	2.1
	120999	AI972375	Hs.29828	hypothetical brain protein my038	2.1
	125636	H12382	Hs.25119	ESTs, Weakly similar to YEX0_YEAST HYPOT	2.1
70	117597	N52090	Hs.47420	EST	2.1
	104333	D82418	Hs.29626	hypothetical brain protein my038	2.1
	134315	AA291183	Hs.81648	hypothetical protein FLJ11021 similar to	2.1
	135332	AW393883	Hs.98968	hypothetical protein FLJ23058	2.1
	107279	S57296	Hs.323910	v-erb-b2 avian erythroblastic leukemia	2.1
	133097	W03512	Hs.6479	hypothetical protein MGC13272	2.1
75	112563	AW961220	Hs.29282	mitogen-activated protein kinase kinase	2.1
	121782	AW452957	Hs.334698	Homo sapiens, clone MGC15203, mRNA, com	2.1
	111567	F12628	Hs.334786	hypothetical protein MGC16040	2.1
	133912	H42679	Hs.77522	major histocompatibility complex, class	2.1
80	134076	AF086215		gb:Homo sapiens full length insert cDNA	2.1
	116665	F04405		gb:HSC2SB082 normalized infant brain cDN	2.1
	133562	M60721	Hs.74870	H2.0 (Drosophila)-like homeo box 1	2.1
	129092	D56365	Hs.63525	poly(rC)-binding protein 2	2.1
	106869	AW875362	Hs.292679	ESTs	2.1

5	130820	AL353934	Hs.288798	hypothetical protein FLJ21012	2.1
	126277	AB037847	Hs.15441	Crm (Cramped Drosophila)-like	2.1
	106392	BE350058	Hs.36787	chromodomain helicase DNA binding protel	2.1
	131902	AA180145	Hs.34348	Homo sapiens mRNA; cDNA DKFZp434P0235 (f	2.1
	120734	AA299548		gb:EST12544 Uterus tumor I Homo sapiens	2.1
	113070	AB032977	Hs.6298	KIAA1151 protein	2.1
	116031	AA452239	Hs.103329	KIAA0970 protein	2.1
	123869	AA620924	Hs.112923	EST	2.1
10	106145	AA424791	Hs.5734	meningioma expressed antigen 5 (hyaluron	2.1
	109061	AA160898		gb:zo79c07.s1 Stragene pancreas (93720	2.1
	126348	T16243	Hs.6473	Homo sapiens cDNA FLJ13992 fs, clone Y7	2.1
	132231	AK000517	Hs.6844	hypothetical protein FLJ20510	2.1
	123132	AI061582	Hs.324179	Homo sapiens cDNA FLJ12371 fs, clone MA	2.1
15	117452	N34687	Hs.44054	ninein (GSK3B Interacting protein)	2.1
	128538	R44214	Hs.101189	ESTs	2.1
	111945	R40663	Hs.124944	ESTs	2.1
	119155	R61715	Hs.310598	ESTs, Moderately similar to ALU1_HUMAN	2.1
20	124382	ALD46406	Hs.103483	KIAA1798 protein	2.1
	129198	N57532	Hs.109315	KIAA1415 protein	2.1
	122059	AA431737	Hs.98749	EST, Moderately similar to T42671 hypoth	2.1
	115643	AA404276	Hs.123253	hypothetical protein FLJ22009	2.0
	112558	AK001821	Hs.15921	hypothetical protein FLJ10759	2.0
	115355	AA262292	Hs.88445	ESTs	2.0
25	130724	AK001507	Hs.306084	Homo sapiens clone FLB6914 PRO1821 mRNA,	2.0
	125350	AW898892	Hs.189741	ESTs	2.0
	104926	BE288808	Hs.33363	DKFZP434N093 protein	2.0
	119468	AI911535	Hs.6657	hypothetical protein BK1048E9.5	2.0
	132891	BE267143	Hs.59271	U2(RNU2) small nuclear RNA auxiliary fac	2.0
30	100237	D30715	Hs.305333	Human PAP (pancreatitis-associated prot	2.0
	105335	AW291165	Hs.25447	ESTs	2.0
	106727	AA357001	Hs.34045	hypothetical protein FLJ20764	2.0
	126053	H64450		gb:yu62d01.r1 Weizmann Olfactory Epithel	2.0
	115084	BE383668	Hs.42484	hypothetical protein FLJ10618	2.0
35	128408	AI183407	Hs.143704	EST	2.0
	132311	AI765559	Hs.20072	myosin regulatory light chain interactin	2.0
	113626	T94318	Hs.17359	ESTs, Moderately similar to RL44_HUMAN 6	2.0
	116379	AA448588	Hs.71252	hypothetical protein DKFZp761C169	2.0
	105474	AL134843	Hs.219614	I-box and leucine-rich repeat protein 11	2.0
40	108922	AA115268	Hs.269263	ESTs	2.0
	123720	AA609734	Hs.112755	EST	2.0
	126902	AA036637	Hs.107052	ESTs	2.0
	113228	AI821008	Hs.10697	ESTs	2.0
	106798	BE252749	Hs.20558	hypothetical protein FLJ20345	2.0
45	106665	BE090009	Hs.323164	hypothetical protein MGC2217	2.0
	105952	AI767152	Hs.181400	ESTs, Weakly similar to I78885 serine/th	2.0
	127248	AA364195		gb:EST75015 Pineal gland II Homo sapiens	2.0
	112972	AI684745	Hs.165983	hypothetical C2H2 zinc finger protein FL	2.0
50	128148	AA918175	Hs.126637	ESTs	2.0
	116176	AA311152	Hs.288708	hypothetical protein FLJ21562	2.0
	126457	AA007489	Hs.50382	ESTs	2.0
	112610	AW500108	Hs.23643	serine/threonine protein kinase MASK	2.0
	109249	AA194730	Hs.268189	hypothetical protein FLJ20436	2.0
55	121292	AA401807		gb:zv65f11.s1 Soares_total_fetus_Nb2HF8_	2.0
	126606	AW058113	Hs.102402	Mad4 homolog	2.0
	127705	AJ003322		gb:AJ003322 Selected chromosome 21 cDNA	2.0
	134674	AF219139	Hs.87726	KIAA0154 protein; ADP-ribosylation facto	2.0
	107529	BE515065	Hs.296585	nuclear protein (KKE/D repeat)	2.0
	116411	AA608897	Hs.321618	hypothetical protein FLJ12525	2.0
60	111576	T88827	Hs.15489	ESTs	2.0
	127002	AL353940	Hs.24979	hypothetical protein DKFZp761P1010	2.0
	112662	R85436	Hs.268814	ESTs	2.0
	126250	AL050391	Hs.321247	Homo sapiens mRNA; cDNA DKFZp586A181 (fr	2.0
	101045	J05614		gb:Human proliferating cell nuclear anti	2.0
65	117188	H88988	Hs.42612	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.0
	122110	AI123000	Hs.301240	melanocortin 1 receptor (alpha melanocyt	2.0
	118849	AI074585	Hs.58440	ESTs	2.0
	124395	N29963	Hs.272095	ESTs, Weakly similar to I38022 hypotheti	2.0
70	131600	NM_004377	Hs.29331	camitine palmitoyltransferase I, muscle	2.0
	112774	R95770	Hs.35455	ESTs	2.0
	109751	AB033492	Hs.6679	NHDC for homolog of Drosophila headcase	2.0
	102377	U40343	Hs.29656	cyclin-dependent kinase inhibitor 2D (p1	2.0
	115197	R18558	Hs.6749	ESTs	2.0
75	102808	BE242818	Hs.179606	nuclear RNA helicase, DECD variant of DE	2.0
	128869	AA768242	Hs.80618	hypothetical protein	2.0
	111229	AW389845	Hs.110855	ESTs	2.0
	129330	AL079310	Hs.92260	high-mobility group protein 2-like 1	2.0
	105448	NM_001188	Hs.154276	BTB and CNC homology 1, basic leucine d	2.0
	127391	AW380893	Hs.11039	hypothetical protein MGC2722	2.0
80	102337	AI814663	Hs.170133	forkhead box O1A (rhabdomyosarcoma)	2.0
	121897	AA427419	Hs.229162	EST, Weakly similar to ZN91_HUMAN ZINC	2.0
	107902	AA026627	Hs.61358	ESTs	2.0
	129340	H75334	Hs.11050	F-box only protein 9	2.0
	101097	BE245301	Hs.89414	chemokine (C-X-C motif), receptor 4 (fus	2.0

5	124864	AW970168	Hs.185708	ESTs	2.0
	118485	AA508515	Hs.291049	ESTs	2.0
	116715	AL117440	Hs.170263	tumor protein p53-binding protein, 1	2.0
	130743	AL049266	Hs.18724	Homo sapiens mRNA; cDNA DKFZp564F093 (fr	2.0
	118877	AW971146	Hs.293187	ESTs	2.0
	100020				2.0
	123252	AW968776	Hs.287586	Homo sapiens cDNA FLJ13548 fis, clone PL	2.0
	134977	AL044983	Hs.306121	leukocyte receptor cluster (LRC) encoded	2.0
10	115334	AA702972	Hs.65300	ESTs	2.0
	111790	AW769683	Hs.6734	ESTs, Weakly similar to S26650 DNA-bind	2.0
	129101	NM_013403	Hs.108665	zinedin	2.0
	132676	N92589	Hs.261038	ESTs, Weakly similar to I38022 hypothet	2.0
	111018	AI287912	Hs.3628	mitogen-activated protein kinase kinase	2.0
15	105933	AF078544	Hs.194686	solute carrier family 25 (mitochondrial	2.0
	110679	AA004788	Hs.108311	ESTs, Weakly similar to T00351 hypothet	2.0
	120661	AA350394	Hs.96952	ESTs	2.0
	132430	AW973652	Hs.283105	ESTs	2.0
	115026	AA251972	Hs.188718	ESTs	2.0
20	128660	AA011597	Hs.177398	ESTs	2.0
	134554	AI184316	Hs.85273	retinoblastoma-binding protein 6	2.0
	109592	AI198059	Hs.26370	ESTs	2.0
	123636	AA609263		gb:af13c08.s1 Soares_testis_NHT Homo sap	2.0
	132610	AA160511	Hs.5326	amino acid system N transporter 2; porcu	2.0
25	122652	AA454841		gb:zx99d05.s1 Soares_NhHMPu_S1 Homo sepi	2.0
	120487	AW292562	Hs.187628	ESTs	2.0
	126046	AA804957	Hs.119840	ESTs	2.0
	128179	AW293689	Hs.127116	ESTs	2.0
	123349	AB033042	Hs.29679	cofactor required for Sp1 transcription	2.0
30	106208	AK001674	Hs.22630	cofactor required for Sp1 transcription	2.0
	125832	AA628600	Hs.117587	ESTs	2.0
	133317	AC005258	Hs.70830	U6 snRNA-associated Sm-like protein LSM7	2.0
	132886	AW978168	Hs.5912	F-box only protein 7	2.0
	127447	AA388192	Hs.193482	Homo sapiens cDNA FLJ11903 fis, clone HE	2.0
35	133149	AA370045	Hs.6607	AXIN1 up-regulated	2.0
	120466	AW967675	Hs.96487	ESTs, Highly similar to S08228 ribosomal	2.0
	106487	AI897340	Hs.135265	Homo sapiens clone FLB8436 PRO2277 mRNA,	2.0
	126770	AI292320	Hs.81361	heterogeneous nuclear ribonucleoprotein	2.0
	120592	AA830664	Hs.143974	ESTs	2.0
40	100944	L07518	Hs.159593	mucin 6, gastric	2.0
	101887	AW867413	Hs.83958	transducin-like enhancer of split 4, hom	2.0
	125324	R07785		gb:yl15c06.r1 Soares fetal liver spleen	2.0
	133906	BE386038	Hs.77492	heterogeneous nuclear ribonucleoprotein	2.0
	113408	NM_005908	Hs.115945	mannosidase, beta A, lysosomal	2.0
45	115613	AW136951	Hs.173946	hypothetical protein FLJ10486	2.0
	107468	AA740979	Hs.91389	ESTs	2.0
	100554	M95923		gb:Human 12-lipoxygenase mRNA, partial c	2.0
	120476	NM_014922	Hs.104305	death effector filament-forming Ced-4-l	2.0
	117160	AA322302	Hs.183302	PCTAIRE protein kinase 2	2.0
50	115582	AW245047	Hs.136164	cutaneous T-cell lymphoma-associated tu	2.0
	125536	F08266	Hs.77946	ESTs, Weakly similar to ALU1_HUMAN ALU 8	2.0
	100842	U05597		gb:Human anion exchanger 3 cardiac isofo	2.0
	133207	AI561173	Hs.67688	ESTs	2.0
	122053	AI637498	Hs.98745	ESTs	2.0
55	121080	AA617830	Hs.28310	ESTs	2.0
	113316	T70318	Hs.288581	ESTs	2.0
	113137	AW952129	Hs.293225	ESTs, Weakly similar to FLDED-1 [H.sapie	1.9
	100416	AW505086	Hs.186914	minor histocompatibility antigen HA-1	1.9
	133975	C18358	Hs.295944	tissue factor pathway inhibitor 2	1.9
60	103872	AI816078	Hs.21766	translation factor sufl homolog	1.9
	132439	AK001942	Hs.4863	hypothetical protein DKFZp566A1524	1.9
	126082	H81188	Hs.269571	ESTs	1.9
	124677	R01073		gb:ye84c03.s1 Soares fetal liver spleen	1.9
65	123385	BE149685	Hs.17767	KIAA1554 protein	1.9
	103138	X65965		gb:H.sapiens SOD-2 gene for manganese su	1.9
	104867	AA278898	Hs.225979	hypothetical protein similar to small G	1.9
	128668	AI754383	Hs.103422	Homo sapiens cDNA FLJ14630 fis, clone NT	1.9
	125826	M20681	Hs.7594	solute carrier family 2 (facilitated glu	1.9
70	113701	T97301	Hs.18026	ESTs	1.9
	134447	M58603	Hs.83428	nuclear factor of kappa light polypeptid	1.9
	128895	AW467000	Hs.106985	ESTs	1.9
	112719	AI200957	Hs.19301	Homo sapiens, Similar to Nedd-4-like ubl	1.9
	102552	NM_005428	Hs.44585	tumor protein p53-binding protein, 2	1.9
75	131186	Z70200	Hs.246112	KIAA0788 protein	1.9
	133347	BE257758	Hs.71475	acid cluster protein 33	1.9
	133388	AW245631	Hs.182447	heterogeneous nuclear ribonucleoprotein	1.9
	112266	AI652534	Hs.25934	ESTs, Weakly similar to HSHU11 histone H	1.9
	100336	N76101	Hs.8127	KIAA0144 gene product	1.9
80	113479	AI023133	Hs.10739	ESTs	1.9
	135231	BE613616	Hs.74280	hypothetical protein FLJ22237	1.9
	123783	AA610112		gb:af19g05.s1 Soares_fetal_fetus_Nb2HF8_	1.9
	113016	NM_014007	Hs.127649	KIAA0414 protein	1.9
	132761	AI815537	Hs.323502	nuclear RNA export factor 1	1.9
	128536	AW955085	Hs.101150	Homo sapiens, clone IMAGE:4054156, mRNA,	1.9

5	126663	AW518478	Hs.181297	ESTs	1.9
	103973	AA305729	Hs.18272	amino acid transporter system A1	1.9
	106742	AW591428	Hs.27556	hypothetical protein FLJ22405	1.9
	129793	AW207000	Hs.126857	Homo sapiens cDNA FLJ12935 fis, clone NT	1.9
	105888	AW970872	Hs.9247	protein kinase, AMP-activated, alpha 1 c	1.9
	101892	AI825838	Hs.75206	protein phosphatase 3 (formerly 2B), cat	1.9
	125511	AJ271379	Hs.76194	ribosomal protein S5	1.9
	128761	AJ378328	Hs.77256	enhancer of zeste (Drosophila) homolog 2	1.9
10	129111	AL080155	Hs.226372	DKFZP434J154 protein	1.9
	128750	T80270	Hs.104788	hypothetical protein LOC55565	1.9
	133531	BE276738	Hs.74578	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	1.9
	125704	R55094	Hs.26239	Human DNA sequence from clone RP11-438B2	1.9
	100157	D14661	Hs.119	Wilms' tumour 1-associated protein	1.9
15	125845	AK001440	Hs.131840	hypothetical protein FLJ10578	1.9
	134682	AW882645	Hs.88044	sprouty (Drosophila) homolog 1 (antagoni	1.9
	105565	NM_014892	Hs.227602	KIAA1116 protein	1.9
	106708	AB037810	Hs.18760	KIAA1389 protein	1.8
	125761	R68351		gb:yh99b03.r1 Soares placenta Nb2HP Homo	1.9
20	116470	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	1.9
	123264	AI681270	Hs.99824	BCE-1 protein	1.9
	126096	F08208	Hs.283844	similar to rat tricarboxylate carrier-II	1.9
	104995	AK001690	Hs.16390	hypothetical protein FLJ10035	1.9
	133424	AA350994	Hs.20281	KIAA1700	1.9
25	132450	AA100012	Hs.48827	hypothetical protein FLJ12085	1.9
	131803	U73737	Hs.284289	villig-associated protein VIT-1	1.9
	116548	O20433		gb:HUMGS01407 Human promyelocyte Homo sa	1.9
	113815	AA388192	Hs.193482	Homo sapiens cDNA FLJ11903 fis, clone HE	1.9
	100245	AL039248	Hs.3094	KIAA0083 gene product	1.9
30	113877	Z70200	Hs.246112	KIAA0788 protein	1.9
	134470	X54942	Hs.83758	CDC28 protein kinase 2	1.9
	134937	AI251449	Hs.171939	ESTs	1.9
	134506	AW247364	Hs.84285	ubiquitin-conjugating enzyme E2i (homolo	1.9
	128469	BE384361	Hs.182885	ESTs, Weakly similar to JC5024 UDP-galac	1.9
35	115261	AA938293	Hs.60088	hypothetical protein MGC11314	1.9
	125198	W69474	Hs.323140	ESTs	1.9
	115317	AA303799	Hs.300141	ribosomal protein L39	1.9
	112342	AW410273	Hs.92614	longevity assurance (LAG1, S. cerevisiae	1.9
	117329	AA524055	Hs.93670	Homo sapiens cDNA: FLJ22664 fis, clone H	1.9
40	116353	AB032958	Hs.131728	KIAA1140 protein	1.9
	114459	AW445217	Hs.103362	ESTs	1.9
	133903	X83992	Hs.77482	DNA (cytosine-5)-methyltransferase 1	1.9
	116083	AA455706	Hs.44581	heat shock protein hsp70-related protein	1.9
	130037	AI498631	Hs.111334	ferritin, light polypeptide	1.9
45	102273	BE391815	Hs.75981	ubiquitin specific protease 14 (IRNA-gua	1.9
	120452	AL022328	Hs.104335	hypothetical protein IMAGE3510317	1.9
	116432	BE271922	Hs.71243	ESTs, Weakly similar to zinc finger prot	1.9
	115918	AI052731	Hs.91910	ESTs	1.9
	120827	AA382525	Hs.132967	Human EST clone 122887 mariner transposo	1.9
50	128602	AI282183	Hs.198298	v-src avian sarcoma (Schmidt-Ruppin A-2)	1.9
	105693	BE250951	Hs.181368	U5 snRNP-specific protein (220 kD), orth	1.9
	102316	U34301		gb:Human nonmuscle myosin heavy chain II	1.9
	131422	AW607731	Hs.26670	Human PAC clone RP3-515N1 from 22q11.2-q	1.9
	128434	AI190914	Hs.143880	ESTs	1.9
55	117086	AA581602	Hs.41840	ESTs	1.9
	102008	AL048967	Hs.172207	non-POU-domain-containing, octamer-bindi	1.9
	121335	AA404418		gb:zw37e02.s1 Soares_tetal_fetus_Nb2HF8_	1.9
	105905	AA401533	Hs.19440	ESTs	1.9
	125165	W45350		gb:zc81h08.s1 Pancreatic islet Homo sapi	1.9
60	109875	H03260	Hs.30385	ESTs	1.9
	109152	AW380723	Hs.73451	ESTs, Weakly similar to S55024 nebulin,	1.9
	126203	AK001035	Hs.130881	B-cell CLL/lymphoma 11A (zinc finger pro	1.9
	122530	AW959741	Hs.40368	adaptor-related protein complex 1, sigma	1.9
	124508	BE273688	Hs.182447	heterogeneous nuclear ribonucleoprotein	1.9
65	130525	AA361850	Hs.322149	Human clone 137308 mRNA, partial cds	1.9
	127226	AL036559	Hs.3463	ribosomal protein S23	1.9
	106465	AA971578	Hs.225951	topoisomerase-related function protein 4	1.9
	106970	AA521368	Hs.24252	ESTs	1.9
	134275	AI878910	Hs.3688	displatin resistance-associated overexpr	1.9
70	126825	AA100230		gb:z81c01.s1 Stratagene colon (937204)	1.9
	132443	AW246148	Hs.266371	hypothetical protein FLJ20274	1.8
	104631	AA002064	Hs.18920	ESTs	1.8
	111468	H62547	Hs.205481	ESTs	1.8
	114317	AA524839	Hs.469	succinate dehydrogenase complex, subunit	1.8
75	126158	N55989	Hs.16390	hypothetical protein FLJ10035	1.8
	113782	AK001567	Hs.311002	Homo sapiens cDNA FLJ10705 fis, clone NT	1.8
	119229	T03229		gb:FBSC2 Fetal brain, Stratagene Homo sa	1.8
	105930	AF016371	Hs.9880	peptidyl prolyl isomerase H (cyclophilin	1.8
	127245	AA323958		gb:EST26810 Cerebellum II Homo sapiens c	1.8
80	100967	BE011845	Hs.251064	high-mobility group (nonhistone chromoso	1.8
	105149	BE089288	Hs.8958	Homo sapiens cDNA FLJ12024 fis, clone HE	1.8
	104542	Z29657		gb:F1-1179D 22 week old human fetal live	1.8
	124236	AF086008		gb:Homo sapiens full length insert cDNA	1.8
	127155	AA284993		gb:z23e10.r1 Soares ovary tumor NbHOT H	1.8

	126854	AJ275986	Hs.71414	transcription factor (SMIF gene)	1.8
	107021	AK001342	Hs.14570	hypothetical protein FLJ22530	1.8
	110023	AW294701	Hs.31040	ESTs	1.8
5	114899	AK000342	Hs.77846	Homo sapiens mRNA; cDNA DKFZp761M0223 (I	1.8
	127315	AF116622		gb:Homo sapiens clone FLB4217 mRNA seque	1.8
	110384	H45282	Hs.268798	ESTs	1.8
	132693	BE244200	Hs.55075	KIAA0410 gene product	1.8
	127684	AA668831	Hs.32556	KIAA0379 protein	1.8
10	127297	AW629485	Hs.140720	GSK-3 binding protein FRAT2	1.8
	104249	AF004231	Hs.22405	leukocyte immunoglobulin-like receptor,	1.8
	112652	BE269699	Hs.235782	solute carrier family 21 (organic anion	1.8
	110312	BE256986	Hs.11896	hypothetical protein FLJ12089	1.8
	100417	NM_014003	Hs.78054	pre-mRNA splicing factor similar to S. c	1.8
15	120532	AA262354	Hs.186648	ESTs, Weakly similar to I38022 hypotheti	1.8
	127628	AA293279	Hs.29173	hypothetical protein FLJ20515	1.8
	100739	M59287	Hs.2083	CDC-like kinase 1	1.8
	110836	H72868	Hs.19110	ESTs	1.8
	132957	BE244044	Hs.61469	hypothetical protein	1.8
20	115467	AI368784	Hs.48820	TATA box binding protein (TBP)-associate	1.8
	132161	W31634	Hs.180799	hypothetical protein FLJ22561	1.8
	129510	AW968504	Hs.123073	CDC2-related protein kinase 7	1.8
	126805	F32658	Hs.101359	chromosome 6 open reading frame 32	1.8
	129295	U63127	Hs.110121	SEC7 homolog	1.8
25	127823	AW972893	Hs.78869	transcription elongation factor A (SII),	1.8
	104590	AW373062	Hs.83623	nuclear receptor subfamily 1, group I, m	1.8
	111959	R40978	Hs.271498	ESTs, Moderately similar to ALU1_HUMAN A	1.8
	109303	AA199857	Hs.269291	ESTs	1.8
	112501	AA972447	Hs.288833	Homo sapiens mRNA; cDNA DKFZp434K087 (I	1.8
30	127303	AA366951		gb:EST77963 Pancreas tumor III Homo sapi	1.8
	115992	W82113		gb:zh48e01.r1 Soares fetal liver spleen,	1.8
	123331	AA497013		gb:ae32g02.s1 Gessler Wäms tumor Homo s	1.8
	111598	R11505	Hs.268912	ESTs	1.8
	121643	AA640987	Hs.193767	ESTs	1.8
35	105012	AF098158	Hs.9329	chromosome 20 open reading frame 1	1.8
	118761	AW799109	Hs.226755	ESTs	1.8
	128765	AF073310	Hs.143648	Insulin receptor substrate 2	1.8
	118103	AA401733	Hs.184134	ESTs	1.8
	134595	NM_002401	Hs.29282	mitogen-activated protein kinase kinase	1.8
40	134212	AA854353	Hs.17719	EBP50-PDZ Interactor of 64 kD	1.8
	128033	AI248706	Hs.149321	ESTs	1.8
	126972	NM_016255	Hs.95260	Autosomal Highly Conserved Protein	1.8
	111122	N83753	Hs.16492	DKFZP564G2022 protein	1.8
	114798	AA159181	Hs.54900	serologically defined colon cancer anti	1.8
45	108349	AW954310	Hs.127270	KIAA1545 protein	1.8
	135356	BE622827	Hs.99485	hypothetical protein FLJ13044	1.8
	116223	AF045458	Hs.47081	unc-51 (C. elegans)-like kinase 1	1.8
	116654	Z26324	Hs.79204	ESTs, Weakly similar to I38022 hypotheti	1.8
	124554	N65961		gb:za27d03.s1 Soares fetal liver spleen	1.8
50	120259	AW014786	Hs.192742	hypothetical protein FLJ12785	1.8
	123044	AK001035	Hs.130881	B-cell CLL/lymphoma 11A (zinc finger pro	1.8
	125261	W90351	Hs.110134	ESTs, Highly similar to CREB-binding pro	1.8
	135026	N92165	Hs.93231	ESTs	1.8
	129951	AL110282	Hs.268024	Homo sapiens, clone IMAGE:3873720, mRNA	1.8
55	125768	AI557486	Hs.119122	ribosomal protein L13a	1.8
	114122	R46128	Hs.12751	ESTs	1.8
	133047	AA310600	Hs.63667	peptide:N-glycanase similar to yeast PNG	1.8
	133589	L37368	Hs.75104	RNA-binding protein S1, serine-rich doma	1.8
	130872	U61084	Hs.226307	phorbol (similar to apolipoprotein B m	1.8
60	133498	BE299587	Hs.85301	calcium binding protein P22	1.8
	131144	AA305255	Hs.23528	HSPC038 protein	1.8
	104261	AW248364	Hs.5409	RNA polymerase I subunit	1.8
	115507	AI083568	Hs.50601	hypothetical protein MGC10986	1.8
	109073	T05003	Hs.10056	hypothetical protein FLJ14621	1.8
65	115363	AA214618	Hs.152769	activator of S phase kinase	1.8
	112657	AW844878	Hs.19769	hypothetical protein MGC4174	1.8
	102960	AI904738	Hs.76053	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	1.8
	125549	R20215		gb:yg18b09.r1 Soares infant brain 1N18 H	1.8
	133797	AL133921	Hs.76272	retinoblastoma-binding protein 2	1.8
70	125048	AW440069	Hs.59425	hypothetical protein FLJ23323	1.8
	103403	X95406		gb:Hsapiens cyclin E gene.	1.8
	123546	AA608817	Hs.112597	EST	1.8
	124694	R08108		gb:ye94h05.s1 Soares fetal liver spleen	1.8
	102406	U43177		(NONE)	1.8
75	130695	T97205	Hs.17998	ESTs, Weakly similar to 2109260A B cell	1.8
	123951	AB012922	Hs.173043	metastasis-associated 1-like 1	1.8
	118533	N71861	Hs.49413	ESTs	1.8
	123197	AA489250		gb:as57h12.s1 NCI_CGAP_GCB1 Homo sapiens	1.8
	125658	AW516428	Hs.78687	neutral sphingomyelinase (N-SMase) activ	1.8
80	100154	H80720	Hs.81892	KIAA0101 gene product	1.8
	106876	N52821	Hs.269412	ESTs, Moderately similar to ALU7_HUMAN A	1.8
	128339	AL121087	Hs.298406	KIAA0685 gene product	1.8
	106939	AL137728	Hs.12258	Homo sapiens mRNA; cDNA DKFZp434B0920 (I	1.8
	102495	NM_008762	Hs.79356	Lysosomal-associated multispanning membr	1.8

	100221	D28383		gb:Human mRNA for ATP synthase B chain,	1.8
	101741	NM_003199	Hs.326198	transcription factor 4	1.8
	101701	NM_002438	Hs.1861	membrane protein, palmitoylated 1 (55kD)	1.8
5	107119	A1375499	Hs.27379	ESTs	1.8
	134362	U47742	Hs.82210	zinc finger protein 220	1.8
	127964	F08298		gb:HSC13F081 normalized infant brain cDN	1.8
	101437	M20681	Hs.7594	solute carrier family 2 (facilitated glu	1.8
	105204	AA188734	Hs.21479	ubiquitin 1	1.8
10	112716	AW590680	Hs.110802	von Willebrand factor	1.8
	109779	AB029396	Hs.3353	beta-1,3-glucuronyltransferase 1 (glucur	1.8
	111359	AA535740	Hs.170263	tumor protein p53-binding protein, 1	1.8
	135204	AF067515	Hs.183418	cell division cycle 2-like 1 (PITSLRE pr	1.8
	105788	AB009698	Hs.23965	solute carrier family 22 (organic anion	1.8
15	110997	AW882823	Hs.168052	KIAA0421 protein	1.8
	111620	R14853	Hs.307478	EST, Weakly similar to I39058 hypothei	1.8
	115618	H11695	Hs.322901	disrupter of silencing 10	1.8
	115904	A167560	Hs.61297	ESTs	1.8
	107510	BE613332	Hs.132055	ESTs, Weakly similar to GNMSLL retroviri	1.8
20	116435	AA186761	Hs.334812	hypothetical protein DKFZp586K0717	1.8
	112399	R60920	Hs.296770	KIAA1719 protein	1.8
	127426	AA854756	Hs.124076	ESTs	1.8
	125175	W52355	Hs.303030	EST	1.8
	132972	AA034365	Hs.288924	Homo sapiens cDNA FLJ11392 fis, clone HE	1.8
25	125982	R88091		gb:yr30a11.1 Soares fetal liver spleen	1.8
	115620	AA399997	Hs.211610	CUG triplet repeat, RNA-binding protein	1.8
	128116	AA355690	Hs.130168	ESTs	1.8
	106880	AA93206	Hs.32425	ESTs	1.7
	101199	L22075	Hs.1666	guanine nucleotide binding protein (G pr	1.7
30	104159	BE386983	Hs.283685	hypothetical protein FLJ20396	1.7
	101368	M13058	Hs.73952	proline-rich protein HaeIII subfamily 2	1.7
	103648	AW248439	Hs.2340	junction plakoglobin	1.7
	130717	AA334274	Hs.18368	DKFZP564B0769 protein	1.7
	124981	N25485	Hs.330310	maternal G10 transcript	1.7
35	124770	AA984414	Hs.120429	ESTs	1.7
	126926	AA178472	Hs.832	ESTs, Highly similar to A41029 integrin	1.7
	101636	BE392781	Hs.89474	ADP-ribosylation factor 6	1.7
	123553	AA494291	Hs.111977	ESTs	1.7
	127172	AA292208	Hs.251278	KIAA1201 protein	1.7
40	130621	AW513087	Hs.16803	LUC7 (S. cerevisiae)-like	1.7
	116925	H73110	Hs.260603	ESTs, Moderately similar to A47582 B-ce	1.7
	108845	AW382901	Hs.68864	ESTs, Weakly similar to phosphatidylseri	1.7
	128092	AA904817	Hs.166229	ESTs	1.7
	128193	AJ224442	Hs.155020	putative methyltransferase	1.7
45	113965	AJ268666	Hs.19631	ESTs, Weakly similar to I38022 hypothei	1.7
	106620	D52562	Hs.296317	KIAA1789 protein	1.7
	102926	W28363	Hs.239752	nuclear receptor subfamily 2, group F, m	1.7
	114964	BE085271	Hs.8834	ring finger protein 3	1.7
	101800	NM_008433	Hs.105806	granulysin	1.7
50	130094	NM_001471	Hs.167017	gamma-aminobutyric acid (GABA) B recepto	1.7
	120112	AA180240	Hs.6083	Homo sapiens cDNA: FLJ21028 fis, clone C	1.7
	109978	H09366	Hs.22528	ESTs	1.7
	121252	AA393907	Hs.97179	ESTs	1.7
	127768	AW085002	Hs.156187	ESTs	1.7
55	125445	AA452722	Hs.7709	WW domain binding protein 1	1.7
	100052				1.7
	119883	AA081218	Hs.58608	Homo sapiens cDNA FLJ14208 fis, clone NT	1.7
	134333	AW888411	Hs.81915	leukemia-associated phosphoprotein p18 (	1.7
	123541	AW876511	Hs.112592	ESTs	1.7
60	134191	W28632	Hs.7979	KIAA0736 gene product	1.7
	103305	X82279		gb:HLsapiens Fas, Apo-1 gene (promoter a	1.7
	112411	R43090	Hs.271510	ESTs, Moderately similar to ALU1_HUMAN A	1.7
	100598	AL121734	Hs.146409	cell division cycle 42 (GTP-binding prot	1.7
	113610	T93279		gb:ye25f01.a1 Stratagene lung (937210) H	1.7
65	105593	AA279341	Hs.174151	aldehyde oxidase 1	1.7
	125317	Z99348	Hs.112461	ESTs, Weakly similar to I38022 hypothei	1.7
	125956	AK000214	Hs.129014	hypothetical protein FLJ20207	1.7
	105105	R81632	Hs.87016	hypothetical protein FLJ22938	1.7
	132791	AB028551	Hs.7910	RING1 and YY1 binding protein	1.7
70	116896	H83935	Hs.40535	ESTs	1.7
	133335	BE251012	Hs.283812	nuclear distribution gene C (A.nidulans)	1.7
	120959	BE247692	Hs.102469	putative nuclear protein	1.7
	105621	AL040058	Hs.6375	uncharacterized hypothalamus protein HT0	1.7
	106181	AI803651	Hs.191808	ESTs	1.7
75	125661	AA491830	Hs.25689	ESTs	1.7
	127585	AA604144	Hs.190632	ESTs	1.7
	112035	AI956289	Hs.300769	ribosomal protein L38	1.7
	102870	M64437	Hs.234799	breakpoint cluster region	1.7
	108039	AA280319	Hs.288840	PRO1575 protein	1.7
80	125898	AK001823	Hs.92287	Homo sapiens mRNA: cDNA DKFZp564C2478 (f	1.7
	114740	N70103		gb:za53e10.a1 Soares fetal liver spleen	1.7
	120304	AA192469	Hs.271838	ESTs	1.7
	103433	X98001	Hs.78948	Rab geranylgeranyltransferase, beta subu	1.7
	116180	AA463902	Hs.13522	ESTs, Weakly similar to I38022 hypothei	1.7

5	105269	AF174499	Hs.6764	histone deacetylase 6	1.7
	125431	AW851639	Hs.75584	polymyositis/scleroderma autoantigen 2 (	1.7
	133579	X75346	Hs.75074	mitogen-activated protein kinase-activat	1.7
	105355	AL031447	Hs.26938	Homo sapiens, clone IMAGE:4053044, mRNA,	1.7
	129601	AB032964	Hs.115726	KIAA1138 protein	1.7
	113739	AA356599	Hs.173904	ESTs	1.7
	100840	U04816	Hs.183418	cell division cycle 2-like 1 (PITSLRE pr	1.7
	122878	AA847744	Hs.99640	ESTs	1.7
10	119495	BE144608	Hs.55533	ESTs	1.7
	125669	RS1308	Hs.333256	ESTs, Weakly similar to ALU8_HUMAN ALU	1.7
	109891	HD4757	Hs.323176	ESTs	1.7
	126884	U49436	Hs.288236	KIAA1856 protein	1.7
	132977	AA093322	Hs.301404	RNA binding motif protein 3	1.7
15	101396	BE257931	Hs.78996	proliferating cell nuclear antigen	1.7
	104730	AW139789	Hs.16370	Homo sapiens cDNA FLJ11652 fs, clone HE	1.7
	102205	BE242291	Hs.197540	hypoxia-inducible factor 1, alpha subuni	1.7
	112945	AW138458	Hs.20787	Homo sapiens cDNA: FLJ21686 fs, clone C	1.7
	129902	AA078278	Hs.13277	hypothetical protein FLJ22054	1.7
20	107157	AW853745	Hs.286035	hypothetical protein FLJ22686	1.7
	133229	AL137480	Hs.6834	KIAA1014 protein	1.7
	129912	AF155098	Hs.107213	hypothetical protein FLJ20585	1.7
	119811	AW137640	Hs.231444	Homo sapiens, Similar to hypothetical pr	1.7
	126323	N77584	Hs.68644	Homo sapiens microsomal signal peptidase	1.7
25	133134	AF188620	Hs.65648	RNA binding motif protein 8A	1.7
	115278	AK002163	Hs.301724	hypothetical protein FLJ11301	1.7
	133817	AW578718	Hs.7644	H1 histone family, member 2	1.7
	130753	AA205223	Hs.189	phosphodiesterase 4C, cAMP-specific (dun	1.7
	107463	AW952022	Hs.315164	hypothetical protein similar to actin re	1.7
30	121009	NM_001533	Hs.2730	heterogeneous nuclear ribonucleoprotein	1.7
	125546	H09950		gb:ym01d12r1 Soares infant brain 1N18 H	1.7
	129991	R28386	Hs.179925	ESTs, Weakly similar to ALU8_HUMAN ALU	1.7
	119015	N95490	Hs.29700	hypothetical protein FLJ20094	1.7
	100058				1.7
35	116655	AF271732	Hs.68090	bridging integrator-3	1.7
	118898	R93325	Hs.58690	ESTs	1.7
	105021	H07860	Hs.306044	CGI-05 protein	1.7
	102098	N25485	Hs.330310	maternal G10 transcript	1.7
	126730	AA442429		gb:zv70g02r1 Soares_total_fetus_Nb2HF8_	1.7
40	113427	T85105	Hs.15471	ESTs	1.7
	122317	T85253	Hs.290874	ESTs, Weakly similar to ALU8_HUMAN ALU S	1.7
	130503	BE208491	Hs.295112	KIAA0818 gene product	1.7
	117348	N24157		gb:yx96b12s1 Soares melanocyte 2NbHM Ho	1.7
	127033	AF163301	Hs.9098	sulfate transporter 1	1.7
45	128554	AW972147	Hs.101395	hypothetical protein MGC11352	1.7
	124733	R20547	Hs.100830	ESTs	1.7
	108310	R98185	Hs.17240	ESTs	1.7
	122638	AL137476	Hs.123609	Homo sapiens mRNA; cDNA DKFZp43410623 (f	1.7
	101075	L03532	Hs.79024	heterogeneous nuclear ribonucleoprotein	1.7
50	126659	T16245		gb:NIB1005R Normalized Infant brain, Ben	1.7
	127717	F12209	Hs.173380	CK2 interacting protein 1; HQ0024c prote	1.7
	105441	N28522	Hs.8935	quinolinate phosphoribosyltransferase (n	1.7
	104188	AA478423	Hs.300870	Homo sapiens mRNA; cDNA DKFZp547M072 (fr	1.7
	134750	L29073	Hs.11139	cold shock domain protein A	1.7
55	106826	BE253927	Hs.24983	hypothetical protein from EUROIMAGE 2021	1.7
	113511	T89578	Hs.189740	ESTs	1.7
	111070	NM_008201	Hs.171834	PCTAIRE protein kinase 1	1.7
	129091	AA056483	Hs.301463	Human Chromosome 16 BAC clone CIT987SK-A	1.7
	129710	AJ277841	Hs.120963	ELG protein	1.7
60	132833	U78525	Hs.57783	eukaryotic translation initiation factor	1.7
	125775	AW514585	Hs.29205	alpha Integrin binding protein 63	1.7
	113675	T81034	Hs.14841	ESTs	1.7
	100487	AU076640	Hs.15243	nucleolar protein 1 (120kD)	1.7
	119302	T25725		gb:ESTDIR162 CD34+DIRECTIONAL Homo sapie	1.7
65	128245	AA993101	Hs.170486	ESTs	1.7
	130322	NM_014247	Hs.154545	PDZ domain containing guanine nucleotide	1.7
	135363	AW589601	Hs.119	Werner' tumour 1-associating protein	1.7
	125181	R40815	Hs.12396	ESTs, Weakly similar to 2004399A chromos	1.7
	132347	BE271016	Hs.169850	ESTs, Weakly similar to T21554 hypotheti	1.7
70	127206	AW816490	Hs.337508	ESTs	1.7
	121880	AW946155	Hs.7750	hypothetical protein AL133208	1.7
	125797	H03117	Hs.111497	similar to mouse neuronal protein 15.6	1.7
	114501	AA075568		gb:zm88f06.s1 Stratagene ovarian cancer	1.7
	126278	AA417302	Hs.63042	DKFZp564J157 protein	1.7
75	120964	AA398085	Hs.142390	ESTs	1.7
	133634	AL035071	Hs.234279	microtubule-associated protein, RP/EB fa	1.7
	107025	AA825523	Hs.21255	ESTs, Weakly similar to 138022 hypotheti	1.7
	105638	AA493453	Hs.247817	H2B histone family, member A	1.7
	135398	M16029	Hs.287270	ret proto-oncogene (multiple endocrine	1.7
80	115794	AA424900	Hs.112227	membrane-associated nucleic acid binding	1.7
	102083	T35901	Hs.75117	interleukin enhancer binding factor 2, 4	1.7
	100188	AW247090	Hs.57101	minichromosome maintenance deficient (S	1.7
	130868	AB037855	Hs.171917	hypothetical protein FLJ11085	1.7
	110493	AI247707	Hs.36915	ESTs	1.7

5	115041	AA252457	Hs.86543	ESTs, Moderately similar to T00256 hypot	1.7
	128764	AW024282	Hs.104938	hypothetical protein MGC15906	1.7
	134065	X78992	Hs.78909	butyrate response factor 2 (EGF-response	1.7
	101082	BE616731	Hs.80645	Interferon regulatory factor 1	1.7
	130945	U20582	Hs.2149	actin like protein	1.7
	106974	AI817130	Hs.9195	Homo sapiens cDNA FLJ13698 fis, clone PL	1.7
	126752	AI073373	Hs.326923	EST, Weakly similar to I38022 hypothetic	1.7
	133327	AL390127	Hs.7104	Kruppel-like factor 13	1.7
10	127005	T81309	Hs.251664	Insulin-like growth factor 2 (somatomedi	1.7
	105615	AA281959	Hs.5210	glia maturation factor, gamma	1.7
	116295	AA742596	Hs.91216	ESTs, Weakly similar to 2004399A chromos	1.7
	111587	AI125887	Hs.20734	ESTs	1.7
	104570	AW878870	Hs.131828	ESTs	1.7
15	134752	BE246762	Hs.89499	arachidonate 5-lipoxygenase	1.7
	130430	W27893	Hs.150580	putative translation initiation factor	1.7
	119244	AW407564	Hs.275855	ribosomal protein S18	1.7
	131152	NM_004380	Hs.23598	CREB binding protein (Rubinstein-Taybi s	1.7
	133419	BE242676	Hs.73172	growth factor independent 1	1.7
20	106542	AA339541	Hs.24956	hypothetical protein FLJ22056	1.7
	116482	AW207000	Hs.126857	Homo sapiens cDNA FLJ12936 fis, clone NT	1.7
	132555	AW500131	Hs.171763	CD22 antigen	1.7
	125840	AB028986	Hs.12064	ubiquitin specific protease 22	1.7
	115416	AA283893	Hs.337079	ESTs	1.7
25	120041	AA830882	Hs.59368	ESTs	1.7
	126295	AI281459	Hs.270114	ESTs	1.7
	122528	AA449804	Hs.292154	stromal cell protein	1.7
Table 2B:					
30	Pkey:	Unique Eos probaset identifier number			
	CAT number:	Gene cluster number			
	Accession:	Genbank accession numbers			
35	Pkey	CAT number	Accession		
	108451	13766_27	AA079195 AA084955 AA126308 AA084958		
	124236	46919_1	AF086006 H64722 H65212 H66282		
	115982	173_2	W92113 AA702794 BE044316 W91984 AA679375 T94184 AA679335 BE503126 AW502118 BE467367 AA584550 AW139964 R93353		
40	116665	1394292_1	AW088477 AI887846 AW502824 W81697 W81696 AA447817 AA447667 F13631 AW268271 AA055366 AW629027 AA677404 AA831618		
	125165	1852047_1	AI124782 AA889402 AA765804 AA765530 AA055698 AA594019 AI267368 AA456946 R93354 AF264624 AW658618 AA601493		
	125324	1692163_1	F04405 BE173130		
	126053	1601238_1	W45350 W45406		
	125499	1562861_1	R07765 T85948 T86972		
	126127	1205826_1	H64450 H64464		
45	125546	356478_1	H10543 R11878		
	126549	1702179_1	N95428 W24040 AW751368 H81987		
	125761	1744008_1	H09950 R18413 AA570553 AW973425		
	127155	200358_1	R20215 R18767		
50	125957	1583542_1	R68351 R68364		
	127245	226662_1	AA284993 AA478122 AA477823		
	127248	227560_1	H41694 H45213		
	127262	231725_1	R98091 W92898		
55	126659	1541209_1	AA323958 AA370268		
	127303	258778_1	AA364195 AA325029 AW962050		
	127315	37938_1	AA828125 AA834883 AA330555		
	128730	297653_1	T16245 R19694 F13545 H10299 T66048 T65279 H18006		
60	103898	187213_3	AA366951 AA470999 AA469425		
	126872	142696_1	AF116822 AI114507 AA640834 AA377999		
	112540	1805263_1	AAA42429 T19477		
	127705	986283_2	AA248884		
	121335	279548_1	AW450979 AA136653 AA136658 AW419381 AA984358 AA492073 BE168945 AA809054 AW238038 BE011212 BE011359 BE011367		
65	120734	208882_1	BE011368 BE011362 BE011215 BE011365 BE011363		
	114620	32082_8	R69751 R70467 H69771 H80879 H80878		
	122652	26401_30	AJ003322 AJ003324		
70	123636	genbank_AA609263	AA404418 AI217248		
	100842	Ugr_HT4398	AA299948 AA299949		
	116548	genbank_D20433	AA642974 AA084223		
	123783	genbank_AA610112	AA454641		
	125032	genbank_T74884	AA609263		
	123808	genbank_AA620552	U05597		
75	102316	entrez_U34301	D20433		
	102408	entrez_U43177	AA610112		
	134076	40321_1	T74884		
	104542	genbank_T47910	AA620552		
	113119	genbank_AA029703	U34301		
	127954	135151_1	U43177		
80	120809	genbank_AA346495	AF086215 W02702 AA284288 W25655		
	113610	genbank_T93279	R29657		
	113947	genbank_W84768	T47910		
	101045	entrez_J05614	AA029703		
			F06296 R18057		
			AA346495		
			T93279		



129969	genbank_N57818	
117031	genbank_H88353	
101447	entrez_M21305	
124540	genbank_N63232	
124554	genbank_N65591	
117348	genbank_N24157	
117357	genbank_N24829	
124677	genbank_R01073	
124694	genbank_R06108	
103138	entrez_X65965	
103305	entrez_X82279	
103392	entrez_X94563	
103403	entrez_X95406	
119229	genbank_T03229	
119302	genbank_T25725	
126825	430458_1	AA100230 AA100274
105225	genbank_AA211777	
121292	genbank_AA401807	
121853	genbank_T02843	T02843
121387	genbank_AA405854	
114501	genbank_AA076566	
100221	entrez_D28383	D28383
123197	genbank_AA489250	AA489250
114740	378876_1	N70103 N70020 AW383189 AJ207469 W00935 W00906 AA551669 AJ343837 AA135199
123331	genbank_AA497013	
107794	genbank_AA019255	
100554	Ugr_HT2241	M95923
123423	genbank_AA598484	
123474	genbank_AA599209	
109061	genbank_AA160898	

TABLE 3A: About 1346 Genes Up-regulated in Acute Lymphocytic Leukemia (ALL) Compared to Normal Adult Hematopoietic Tissues

Table 3A lists about 1346 genes up-regulated in acute lymphocytic leukemia (ALL) compared to normal adult hematopoietic tissues. These were selected from 35403 probesets on the Affymetrix/Eos Huda1 GeneChip array such that the ratio of "average" leukemia to "average" normal adult hematopoietic tissues was greater than or equal to 3.0. The "average" leukemia level was set to the 65<sup>th</sup> percentile amongst various ALL samples. The "average" normal adult hematopoietic tissue level was set to the 75<sup>th</sup> percentile amongst various non-malignant hematopoietic tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Key: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of leukemia to hematopoietic tissues

Key	ExAccn	UnigenelD	Unigene Title	R1
129498	AA449789	Hs.75511	connective tissue growth factor	57.88
100458	S74019	Hs.247879	pre-B lymphocyte gene 1	49.45
133774	X54079	Hs.76067	heat shock 27kD protein 1	48.42
102564	U59423	Hs.79067	MAD (mothers against decapentaplegic, D)	41.49
130650	AB040951	Hs.284208	DKFZP434N161 protein	35.88
132922	AF249745	Hs.6068	Rho guanine nucleotide exchange factor	35.74
112254	AA852097	Hs.25829	ras-related protein	33.28
106706	AB037810	Hs.18760	KIAA1389 protein	32.39
101050	AJ077324	Hs.1832	neuropeptide Y	30.68
102455	U48705	Hs.75562	discoilin domain receptor family, member	26.81
101838	BE243845	Hs.75511	connective tissue growth factor	25.46
113374	T79925	Hs.269165	ESTs, Weakly similar to ALU1_HUMAN ALU S	24.69
134125	NM_014781	Hs.50421	KIAA0203 gene product	24.63
106943	AW888222	Hs.9973	tensin	23.14
130069	AJ754813	Hs.146428	collagen, type V, alpha 1	23.06
119073	BE245360	Hs.279477	ESTs	22.53
130444	M12125	Hs.300772	tropomyosin 2 (beta)	21.98
100420	D86983	Hs.118893	Melanoma associated gene	21.05
114324	AF084481	Hs.26077	Wolfram syndrome 1 (wolframin)	18.95
101400	M15990	Hs.194148	v-yes-1 Yamaguchi sarcoma viral oncogene	18.48
102759	NM_005100	Hs.788	A kinase (PRKA) anchor protein (gravin)	17.88
100893	BE245294	Hs.180789	S164 protein	16.75
131689	AB012124	Hs.30696	transcription factor-like 5 (basic helix	16.60
106410	AB037787	Hs.26229	neurotigin 2	16.51
101304	AA001021	Hs.6685	thyroid hormone receptor interactor 8	15.60
131524	AB040927	Hs.301804	KIAA1494 protein	15.01
107794	AA019255		gbze56e10.s1 Soares ref1 N2b4HR Homo	14.78
129213	AJ148494	Hs.109525	ESTs, Weakly similar to IRX2_HUMAN IROQU	14.76
116068	AA328041	Hs.194329	hypothetical protein FLJ21174	14.24
134416	X68264	Hs.211579	melanoma cell adhesion molecule	14.06
134545	AJ902899	Hs.85155	butyrate response factor 1 (EGF-response	14.03
114009	AJ248544	Hs.103000	KIAA0831 protein	13.93
115110	AK001871	Hs.11387	KIAA1453 protein	13.75
130107	AF112977	Hs.172887	phytanoyl-CoA hydroxylase (Refsum diseas	13.60
133558	X68945	Hs.748	fibroblast growth factor receptor 1 (fms	13.60
100871	T85231	Hs.179661	tubulin, beta 5	13.50
101462	AL035668	Hs.73853	bone morphogenetic protein 2	13.48
120809	AA346495		gb:EST52657 Fetal heart II Homo sapiens	13.33

5	123340	AA504264	Hs.182937	peptidylprolyl isomerase A (cyclophilin)	13.25
	103460	AI021893	Hs.14331	S100 calcium-binding protein A13	13.25
	102460	U48959	Hs.211582	myosin, light polypeptide kiso	13.14
	100168	H73444	Hs.394	adrenomedullin	13.09
	115844	AI373052	Hs.332938	hypothetical protein MGC5370	13.00
	130103	Y13492	Hs.149098	smoothelin	12.92
	102407	AW602154	Hs.82143	ET4-like factor 2 (ets domain transcript)	12.03
	113832	T94907	Hs.188572	ESTs	11.85
10	118951	NM_000448	Hs.73958	recombination activating gene 1	11.73
	100305	NM_004941	Hs.171872	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	11.63
	109737	AA055415	Hs.13233	ESTs, Moderately similar to A47582 B-cel	11.55
	122577	AA829725	Hs.334437	hypothetical protein MGC4248	11.49
	115147	AA745781	Hs.38399	hypothetical protein MGC2454	11.40
15	132303	BE177330	Hs.325093	Homo sapiens cD: FLJ21210 fs, clone C	11.37
	103176	AL021154	Hs.76884	Inhibitor of D binding 3, dominant neg	11.17
	108358	MB1933	Hs.1634	cell division cycle 25A	11.15
	104584	AA704538	Hs.183777	ESTs	11.12
	106777	AF037261	Hs.33787	vinexin beta (SH3-containing adaptor mol	11.08
20	121054	AW976570	Hs.97387	ESTs	10.90
	119400	T92767		gb:ye27d06.s1 Stratagene lung (937210) H	10.83
	126610	AI911353	Hs.191391	ESTs	10.83
	134555	U34879	Hs.85279	hydroxysteroid (17-beta) dehydrogenase 1	10.80
	131555	T47384	Hs.278613	interferon, alpha-inducible protein 27	10.79
25	130979	NM_012446	Hs.169833	single-stranded-D-binding protein	10.70
	113783	AL359588	Hs.7041	hypothetical protein DKFZp762B226	10.65
	123503	AW975051	Hs.293156	ESTs, Weakly similar to I78885 serine/th	10.60
	117031	H88353		gb:yyw21a02.s1 Morton Fetal Cochlea Homo	10.45
	100752	T81309	Hs.251684	insulin-like growth factor 2 (somatomedi	10.44
30	102618	AL037672	Hs.81071	extracellular matrix protein 1	10.38
	113089	T40707	Hs.270862	ESTs	10.33
	132089	W22007	Hs.39122	hypothetical protein MGC15737	10.29
	101663	NM_003528	Hs.2178	H2B histone family, member Q	10.23
35	104876	AI933128	Hs.25220	like-glycosyltransferase	10.23
	106370	AF039843	Hs.18676	sprouty (Drosophila) homolog 2	10.18
	129406	AB018265	Hs.111138	KIAA0712 gene product	10.18
	115354	AA261636	Hs.334827	ESTs	10.13
	123077	AA485229	Hs.105649	ESTs	10.05
	131273	AW206008	Hs.283378	Homo sapiens cD: FLJ21778 fs, clone H	9.95
40	126177	AW752782	Hs.129750	hypothetical protein FLJ10546	9.83
	133699	BE501689	Hs.75617	collagen, type IV, alpha 2	9.80
	110855	AB007928	Hs.28169	KIAA0459 protein	9.65
	111826	R35975		gb:yyh91b07.s1 Soares placenta Nb2HP Homo	9.58
	126947	Z40778	Hs.191837	ESTs	9.50
45	116674	AI768015	Hs.92127	ESTs	9.48
	129087	AI348027	Hs.108557	hypothetical protein PP1057	9.46
	114837	BE244930	Hs.166895	ESTs	9.45
	120009	AI080491	Hs.93270	ESTs, Moderately similar to S65657 alpha	9.45
	112483	AW989785	Hs.285885	Homo sapiens cD FLJ11321 fs, clone PL	9.40
50	103487	AA743603	Hs.172108	nucleoporin 88kD	9.30
	105675	AL390083	Hs.271277	hypothetical protein from EUROIMAGE 3636	9.28
	129158	NM_004413	Hs.109	dipeptidase 1 (rel)	9.23
	114394	T34462	Hs.103291	neuritin	9.17
	133331	Y14487	Hs.738	ribosomal protein L14	9.11
55	114787	AA156509	Hs.231892	ESTs, Weakly similar to S65657 alpha-1C-	9.10
	125502	AW977181	Hs.194718	zinc finger protein 265	9.03
	132325	N37085	Hs.44856	hypothetical protein FLJ12118	9.01
	127968	AA830201	Hs.124347	ESTs	9.00
	114605	AL157423	Hs.306478	Homo sapiens mR: cD DKFZp761O0511 (f	8.93
60	114875	AA235609	Hs.236443	Homo sapiens mR: cD DKFZp564N1063 (f	8.93
	128998	AI672731	Hs.13255	ESTs	8.89
	106263	W21493	Hs.28329	hypothetical protein FLJ14005	8.89
	117130	AA748850	Hs.125830	bladder cancer overexpressed protein	8.88
	105553	AA258756	Hs.31178	ESTs	8.85
65	103657	Z73677		gb:HLsapiens gene encoding plakophilin 1	8.83
	105831	AA329449	Hs.247302	twisted gastrulation	8.82
	106375	AW872878	Hs.289072	hypothetical protein FLJ22175	8.80
	114518	AW163267	Hs.106489	suppressor of var1 (S.cerevisiae) 3-like	8.75
	123433	AW450922	Hs.112478	ESTs	8.67
70	134558	NM_001773	Hs.85289	CD34 antigen	8.67
	115893	AI652127	Hs.48419	ESTs	8.67
	128621	AA032197	Hs.102558	Homo sapiens, clone MGC:5352, mR, comp	8.60
	122798	AW366286	Hs.145696	splicing factor (CC1.3)	8.58
	112554	F71489	Hs.29198	EST	8.55
75	129989	N57818		gb:yy59d07.s1 Soares fetal liver spleen	8.53
	131558	AA453208	Hs.28726	RAB9, member RAS oncogene family	8.45
	134027	Z97630	Hs.226117	H1 histone family, member 0	8.45
	134138	AB023169	Hs.7935	KIAA0952 protein	8.43
	120030	AI076355	Hs.58694	ESTs	8.43
80	101005	NM_005239	Hs.85146	v-ets avian erythroblastosis virus E26 o	8.33
	115423	AI499516	Hs.89303	ESTs	8.33
	104948	AW242407	Hs.73848	carcinoembryonic antigen-related cell ad	8.30
	131965	W79263	Hs.35962	ESTs	8.30
	126426	AA125984		gb:zn27h06.r1 Stratagene neuroepithelium	8.28

5	108888	AW248434	Hs.91521	hypothetical protein	8.26
	107885	T40064	Hs.71968	Homo sapiens mR: cD DKFZp564F053 (fr	8.25
	114239	AL137667	Hs.267445	Homo sapiens mR: cD DKFZp434B231 (fr	8.23
	124281	AJ333756	Hs.111801	arsenite resistance protein ARS2	8.23
	117099	H83699		gbtvy16a11.s1 Soares fetal liver spleen	8.20
	119432	AL120247	Hs.40109	KIAA0872 protein	8.15
	115957	AJ745379	Hs.42911	ESTs	8.15
	132355	D87942	Hs.46328	fucosyltransferase 2 (secretor status in	8.13
10	108339	AW151340	Hs.51615	ESTs, Weakly similar to ALU7_HUMAN ALU S	8.10
	131694	NM_000246	Hs.3076	MHC class II transactivator	8.05
	104897	N33937	Hs.10336	ESTs	8.03
	120266	AJ807264	Hs.205442	ESTs, Weakly similar to T34038 hypotheti	8.03
	130404	AJ872727	Hs.78753	endoglin (Osler-Rendu-Weber syndrome 1)	8.00
15	115729	AA417812	Hs.38775	ESTs	8.00
	127216	AJ798703	Hs.143702	ESTs, Weakly similar to S70029 probable	7.95
	131693	AW963776	Hs.110796	SAR1 protein	7.93
	113107	AJ821027	Hs.8429	ESTs	7.90
	122282	BE246331	Hs.98401	Homo sapiens mR full length insert cDN	7.90
20	111040	AJ435502	Hs.14931	ESTs	7.90
	127987	AJ022103	Hs.124511	ESTs	7.90
	125317	Z93348	Hs.112461	ESTs, Weakly similar to I38022 hypotheti	7.88
	105242	AJ554857	Hs.27688	ESTs, Weakly similar to serine/threonine	7.75
	100421	D86985	Hs.79276	KIAA0232 gene product	7.71
25	114359	NM_016929	Hs.283021	chloride intracellular channel 5	7.70
	119772	AJ250839	Hs.58241	gene for serine/threonine protein kinase	7.70
	124040	U23752	Hs.32964	SRY (sex determining region Y)-box 11	7.65
	134361	BE549343	Hs.82208	acyl-Coenzyme A dehydrogenase, very long	7.57
	105476	AL117352	Hs.120828	Human D sequence from clone RP5-876B10	7.55
30	113289	T66900	Hs.188446	ESTs	7.50
	122707	NM_002039	Hs.239706	GRB2-associated binding protein 1	7.50
	130055	AJ568248	Hs.146355	v-abl Abelson murine leukemia viral onco	7.49
	108766	AF145713	Hs.61490	schwannomin-interacting protein 1	7.45
	107957	Z35842	Hs.57548	ESTs	7.45
35	123116	AW190412	Hs.183738	FERM, RhoGEF (ARHGEF) and pleckstrin dom	7.38
	123190	AA489212	Hs.105228	EST	7.38
	129574	AA026815	Hs.11463	UMP-CMP kinase	7.38
	115274	C01568	Hs.86671	ESTs	7.35
	102571	U80115	Hs.239069	four and a half LIM domains 1	7.34
40	116845	AA649630		gbns44R05.s1 NCI_CGAP_Alv1 Homo sapiens	7.33
	134851	AB011124	Hs.90232	KIAA0552 gene product	7.33
	101780	M82882	Hs.154365	E74-Eks factor 1 (ets domain transcript	7.28
	125042	T78906	Hs.269432	ESTs, Moderately similar to ALU1_HUMAN A	7.28
	118472	AL157545	Hs.42179	bromodomain and PHD finger containing, 3	7.25
45	108700	AA121518	Hs.193540	ESTs, Moderately similar to 2109260A B c	7.23
	109411	R98881	Hs.109655	sex comb on middle (Drosophila)-like 1	7.20
	127692	AJ021912	Hs.187983	ESTs	7.18
	128501	AL133572	Hs.199009	protein containing CXXC domain 2	7.18
	107727	AA149707	Hs.173091	ubiquitin-like 3	7.14
50	118089	AJ762507	Hs.47878	ESTs	7.12
	106025	AV653785	Hs.173334	ELL-RELATED R POLYMERASE II, ELONGATIO	7.10
	122111	AW593206	Hs.98785	Kap37 protein	7.08
	119674	W60379	Hs.57773	ESTs	7.05
	126607	W87425	Hs.114688	ESTs	7.05
55	121545	AA412442	Hs.98132	ESTs	7.05
	113287	T66847	Hs.194040	ESTs, Weakly similar to I38022 hypotheti	7.03
	126672	AA255592	Hs.203631	ESTs, Weakly similar to alternatively sp	7.00
	132087	H14486	Hs.3903	Cdc42 effector protein 4; binder of Rho	6.97
	118697	N22706	Hs.43234	ESTs	6.97
60	100295	M74782	Hs.172689	interleukin 3 receptor, alpha (low affin	6.95
	101188	L20320	Hs.184298	cyclin-dependent kinase 7 (homolog of Xe	6.95
	121481	AA411931		gbzu03g05.s1 Soares_testis_NHT Homo sap	6.95
	113003	AW292315	Hs.7215	ESTs	6.93
	101851	BE260964	Hs.82045	midline (neurite growth-promoting factor	6.91
65	113529	AJ190741	Hs.177415	Rinkel-Bischoff-Reilly murine sarcoma viru	6.90
	132887	AA195831	Hs.273385	guanine nucleotide binding protein (G pr	6.90
	113560	T91015	Hs.268826	ESTs	6.85
	123440	AJ733692	Hs.112488	ESTs	6.83
	130390	AA490770	Hs.182382	ESTs	6.83
70	133869	U48959	Hs.211582	myosin, light polypeptide kinase	6.83
	113573	R69379	Hs.15990	ESTs	6.80
	112453	R63899	Hs.28455	ESTs	6.78
	125221	AA236115	Hs.120785	ESTs	6.78
	134081	AL034349	Hs.79005	protein tyrosine phosphatase, receptor t	6.77
75	127610	AA960867	Hs.150271	ESTs, Highly similar to unmed protein	6.75
	105486	AW449258	Hs.6187	ESTs	6.75
	107796	AA058848	Hs.60797	ESTs	6.71
	132754	AJ752244	Hs.75309	eukaryotic translation elongation factor	6.71
	105806	AF206019	Hs.110347	REV1 (yeast homolog)-like	6.70
80	110837	H03109	Hs.108920	HT018 protein	6.65
	117698	N82293	Hs.45107	ESTs	6.65
	128894	AF205849	Hs.107740	Kruppel-like factor 2 (lung)	6.65
	129131	AB026436	Hs.177534	dual specificity phosphatase 10	6.65
	108528	AA650558	Hs.326202	ESTs, Highly similar to GBAS_HUMAN GUANI	6.62

5	131009	AF169802	Hs.22142	cytochrome b5 reductase b5R2	6.61
	129389	NM_012445	Hs.288128	spondin 2, extracellular matrix protein	6.60
	125278	AI218439	Hs.129998	enhancer of polycomb 1	6.59
	124667	W24320	Hs.102941	Homo sapiens cD: FLJ21531 fls, clone C	6.59
	105640	AA001021	Hs.6685	thyroid hormone receptor interactor 8	6.58
	106474	BE383668	Hs.42484	hypothetical protein FLJ10618	6.58
	105808	AI133161	Hs.286131	CGI-101 protein	6.53
	120087	AF186780	Hs.79219	RaiGDS-like gene; KIAA0959 protein	6.52
10	100514	AU076887	Hs.28491	spermidine/spermine N1-acetyltransferase	6.50
	108378	AI368460	Hs.74615	platelet-derived growth factor receptor,	6.50
	133350	AI499220	Hs.71573	hypothetical protein FLJ10074	6.50
	115673	AA406341	Hs.269908	Homo sapiens cD FLJ11991 fls, clone HE	6.48
	133410	Y07847	Hs.73088	RAS-related on chromosome 22	6.48
15	131281	AA251716	Hs.25227	ESTs	6.46
	105510	Z42047	Hs.283978	Homo sapiens PRQ2751 mR, complete cds	6.45
	128766	AW160432	Hs.296460	craniofacial development protein 1	6.45
	114530	AA601038	Hs.191797	ESTs, Weakly similar to S65657 alpha-1C-	6.43
	120120	BE547267	Hs.69791	hypothetical protein MGC13183	6.40
20	120593	AA748355	Hs.193522	ESTs	6.40
	125832	AA628600	Hs.117587	ESTs	6.38
	129837	NM_004606	Hs.1179	TATA box binding protein (TBP)-associate	6.38
	115302	AL109719	Hs.47578	ESTs	6.33
	126137	AA312594	Hs.99115	hypothetical protein FLJ20689	6.30
25	114465	BE621056	Hs.131731	hypothetical protein FLJ11099	6.29
	125562	AI494372	Hs.98968	hypothetical protein FLJ23058	6.29
	127380	AF070654	Hs.15535	Homo sapiens clone 24582 mR sequence	6.26
	106958	R06428	Hs.226351	ESTs	6.25
	105962	AW580358	Hs.339808	hypothetical protein FLJ10120	6.25
30	109416	BE268388	Hs.86945	ESTs, Weakly similar to A45010 X-linked	6.23
	111116	AK002039	Hs.28243	Homo sapiens cD FLJ11177 fls, clone PL	6.23
	127282	AA347158	Hs.185780	ESTs	6.23
	113074	AK001335	Hs.31137	protein tyrosine phosphatase, receptor I	6.21
	101654	AA436989	Hs.121017	H2A histone family, member A	6.20
35	103317	X83441	Hs.166091	ligase IV, D, ATP-dependent	6.20
	133894	AW021236	Hs.180433	rTS beta protein	6.19
	109260	AW976515	Hs.131915	KIAA0863 protein	6.18
	112772	AI992283	Hs.35437	ESTs, Moderately similar to 138026 MLN 6	6.18
	132050	AI267615	Hs.38022	ESTs	6.18
40	113009	T23699	Hs.7246	ESTs	6.17
	118835	AA535246	Hs.50852	ESTs	6.16
	125626	AI038854	Hs.180789	S184 protein	6.15
	117086	AA581602	Hs.41840	ESTs	6.14
	101960	AL036287	Hs.194662	calponin 3, acidic	6.13
45	104488	N56191	Hs.108511	protocadherin 17	6.13
	127695	AA714731	Hs.291457	ESTs, Weakly similar to heterogeneous r	6.13
	127894	AL121053	Hs.5534	Homo sapiens cD FLJ12961 fls, clone NT	6.13
	113595	T92056	Hs.290240	ESTs, Moderately similar to ALU2_HUMAN A	6.10
	120784	AW752101	Hs.18580	hypothetical protein FLJ11026	6.10
50	115004	AA329340	Hs.4887	mannosyl (alpha-1,3)-glycoprotein beta-	6.08
	129740	BE166866	Hs.83623	nuclear receptor subfamily 1, group 1, m	6.05
	117483	N72185	Hs.44189	ESTs	6.04
	103815	BE245294	Hs.180789	S164 protein	6.03
	122040	AA847758	Hs.111030	ESTs	6.03
55	109538	AW977747	Hs.119120	E3 ubiquitin ligase SMURF1	6.02
	112727	T91029	Hs.15069	ESTs	6.01
	120273	AA176688	Hs.269284	ESTs	6.00
	122127	AW207175	Hs.106771	ESTs	6.00
	126046	AA804957	Hs.118840	ESTs	5.99
60	119774	AB032977	Hs.6298	KIAA1151 protein	5.98
	108265	AA412176	Hs.236463	Homo sapiens mR: cD DKFZp586i0521 (I	5.98
	111587	NM_015310	Hs.6763	KIAA0942 protein	5.98
	123619	AA602964		gbno97c02s1 NCL_CGAP_Pr2 Homo sapiens	5.96
	128122	AI267491	Hs.160593	ESTs	5.95
65	128473	T78277	Hs.100293	O-linked N-acetylglucosamine (Glc) tr	5.95
	102283	AW161552	Hs.83381	guanine nucleotide binding protein 11	5.94
	122468	AA448172	Hs.137687	ESTs, Highly similar to K6B1_HUMAN RIBOS	5.93
	101801	M88407	Hs.1218	actinin, alpha 3	5.93
	107059	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E coli Ra	5.92
70	108508	AA136569	Hs.10848	KIAA0187 gene product	5.90
	121470	AA558958	Hs.324751	ESTs	5.90
	131938	AF176085	Hs.34956	neural polypyrimidine tract binding prot	5.89
	109613	H47315	Hs.27519	ESTs	5.89
	109384	AA219172	Hs.86849	ESTs	5.88
75	118559	N88456	Hs.49519	ESTs	5.88
	102010	U02687	Hs.385	time-related tyrosine kinase 3	5.85
	105921	AA421973	Hs.169119	ESTs, Weakly similar to T25731 hypotheti	5.85
	124298	H91679		gb:yy04a07.s1 Soares fetal liver spleen	5.85
80	120527	AA382525	Hs.132967	Human EST clone 122887 mariner transpos	5.84
	103331	AI825463	Hs.147996	protein kinase, X-linked	5.82
	135052	AL136653	Hs.93675	decidual protein induced by progesterone	5.80
	115219	AA262776	Hs.269314	Homo sapiens cD FLJ14123 fls, clone MA	5.78
	121899	R55341	Hs.50421	KIAA0203 gene product	5.78
	135217	AA453880	Hs.9658	hypothetical protein FLJ11790	5.77

5	123973	C14805	Hs.29852	gb:C14805 Clontech human aorta polyA+ mR	5.77
	112605	R79374	Hs.31608	ESTs	5.76
	110151	H18835	Hs.131899	hypothetical protein FLJ20041	5.75
	129889	AA810932	Hs.9216	ESTs, Weakly similar to T00370 hypotheti	5.75
	102638	U67319	Hs.104772	caspase 7, apoptosis-related cysteine pr	5.73
	121501	AA470687	Hs.332635	ESTs	5.73
	124921	R93082	Hs.23155	ESTs	5.70
	109850	AJ150548	Hs.5094	ESTs	5.70
10	120594	AW136478	Hs.75789	ring finger protein 10	5.70
	126433	AA325606	Hs.227602	gb:EST28707 Cerebellum II Homo sapiens c	5.70
	100455	AW888941	Hs.187650	N-myc downstream regulated	5.69
	106565	NM_014892	Hs.81964	KIAA1116 protein	5.68
	120912	AA378690	Hs.330425	ESTs	5.68
15	127209	AA305023	Hs.81964	SEC24 (S. cerevisiae) related gene famil	5.68
	107606	AF207989	Hs.302634	Homo sapiens, Similar to G protein-coupl	5.67
	106597	AI091277	Hs.78961	frizzled (Drosophila) homolog 8	5.66
	102126	AW950870		protein phosphatase 1, regulatory (inhib	5.65
	100064			AFFX control - TrpnX-3	5.63
20	108758	AA127395	Hs.222414	ESTs	5.63
	101392	NM_002507	Hs.1827	nerve growth factor receptor (TNFR super	5.61
	102211	BE314524	Hs.78776	putative transmembrane protein	5.60
	107427	W26975	Hs.46736	hypothetical protein FLJ23476	5.60
	135175	M91463	Hs.95558	solute carrier family 2 (facilitated glu	5.60
25	111784	AJ420368	Hs.290259	ESTs, Weakly similar to I38022 hypotheti	5.58
	119405	T93865	Hs.91085	ESTs	5.58
	126464	AJ990046	Hs.54780	transcription termination factor, R po	5.58
	133865	AB011155	Hs.170280	discs, large (Drosophila) homolog 5	5.58
30	123255	AA830335	Hs.105273	ESTs	5.57
	122881	AA335721	Hs.119394	ESTs	5.56
	112046	AA383343	Hs.22116	CDC14 (cell division cycle 14, S. cerevi	5.55
	132906	BE613337	Hs.234896	geminin	5.55
	109001	AJ056548	Hs.72116	hypothetical protein FLJ20992 similar to	5.55
	115816	BE042915	Hs.287588	Homo sapiens cD FLJ13876 fis, clone PL	5.55
35	128401	R01865	Hs.268586	ESTs	5.53
	129298	AJ051957	Hs.110122	ESTs	5.53
	120314	T10013	Hs.221040	HBS1 (S. cerevisiae)-like	5.51
	132815	AJ815189	Hs.57475	sex comb on midleg homolog 1	5.50
	113983	W87415	Hs.55296	HLA-B associated transcript-1	5.50
40	105002	AA224244	Hs.182704	ESTs, Moderately similar to alternative	5.49
	132025	AA011117	Hs.3745	milk fat globule-EGF factor 8 protein	5.49
	110732	AW070838	Hs.174174	KIAA0601 protein	5.48
	112891	T03927	Hs.293147	ESTs, Moderately similar to A46010 X-in	5.48
	126758	AJ559444	Hs.293360	ESTs	5.48
45	129426	AF077953	Hs.111323	Protein inhibitor of activated STAT X	5.47
	103217	NM_001841	Hs.73037	canbinoid receptor 2 (macrophage)	5.46
	132261	U80743	Hs.306094	trinucleotide repeat containing 12	5.45
	105586	AA865118	Hs.191538	ESTs	5.43
	109454	AA232255	Hs.295232	ESTs, Moderately similar to A46010 X-in	5.43
50	113063	W15573	Hs.5027	ESTs, Weakly similar to A47582 B-cell gr	5.43
	134092	AA218558	Hs.7905	sorting nexin 9	5.41
	119316	AJ114630	Hs.208334	Homo sapiens cD: FLJ21874 fis, clone H	5.38
	108019	AJ017773	Hs.249159	adrenergic, alpha-2A-, receptor	5.38
55	109421	AW604652	Hs.332442	ESTs	5.38
	111929	AF027208	Hs.112360	prominin (mouse)-like 1	5.38
	119718	W69216	Hs.92848	ESTs	5.38
	106154	BE540255	Hs.6894	Homo sapiens cD: FLJ22044 fis, clone H	5.35
	108544	W39433	Hs.23971	hypothetical protein DKFZp547N043	5.35
	119580	AL079310	Hs.92260	high-mobility group protein 2-like 1	5.35
60	126777	AL157491	Hs.145211	Homo sapiens mR: cD DKFZp434K1111 (f	5.35
	112944	H18083	Hs.13254	ESTs	5.34
	103149	NM_006201	Hs.171834	PCTAIRE protein kinase 1	5.34
	132437	AA152106	Hs.4859	cyclin L, ania-6a	5.33
	103860	AW976877	Hs.38057	ESTs	5.33
65	104865	T79340	Hs.22575	B-cell CLL/lymphoma 6, member B (zinc fi	5.33
	129914	NM_012421	Hs.13321	rearranged L-myc fusion sequence	5.33
	130309	AF087804	Hs.15423	hypothetical protein HDCCM04P	5.31
	116312	BE379794	Hs.65403	hypothetical protein	5.30
	124191	T96509	Hs.248549	ESTs, Moderately similar to S65657 alpha	5.28
70	125583	AA195667	Hs.86022	ESTs	5.28
	130591	N59846	Hs.169745	crumbs (Drosophila) homolog 1	5.28
	116355	AA789133	Hs.88650	ESTs	5.26
	115553	AJ276988	Hs.71414	transcription factor (SMIF gene)	5.26
	122802	AJ687303	Hs.285529	G protein-coupled receptor 49	5.25
75	128495	NM_005904	Hs.100602	MAD (mothers against decapentaplegic, Dr	5.24
	117667	U59305	Hs.44708	Ser-Thr protein kinase related to the my	5.23
	127890	AA294834	Hs.293902	ESTs, Weakly similar to ISHUS protein d	5.22
	134843	AA428520	Hs.90061	progesterone binding protein	5.21
	120988	AA528283	Hs.292737	ESTs	5.21
80	102076	BE299197	Hs.179665	cyclin-dependent kinase inhibitor 1A (p2	5.20
	100934	J03019	Hs.99913	adrenergic, beta-1-, receptor	5.20
	112667	BE538516	Hs.15423	hypothetical protein HDCCM04P	5.20
	119304	AW249266	Hs.98493	X-ray repair complementing defective rep	5.20
	131868	AW408296	Hs.33532	zinc finger protein 151 (pH2-67)	5.20

105914	AW245680	Hs.9701	growth arrest and D-damage-inducible,	5.18
102258	NM_001546	Hs.34853	inhibitor of D binding 4, dominant neg	5.18
103850	AA187101	Hs.213194	hypothetical protein MGC10895	5.18
112516	T83909		gbvz57110.r1 Soares fetal liver spleen	5.18
133640	AW246428	Hs.75355	ubiquitin-conjugating enzyme E2N (homolo	5.18
135180	D90070	Hs.98	phorbol-12-myristate-13-acetate-induced	5.18
135309	AI564123	Hs.42500	ADP-ribosylation factor-like 5	5.18
134801	S76825	Hs.89595	insulin receptor	5.17
133362	AK001519	Hs.7194	CGI-74 protein	5.17
135206	AB024703	Hs.98334	ring finger protein 11	5.15
111480	R06453	Hs.19708	ESTs	5.15
118466	N66741		gbvz33g08.s1 Morton Fetal Cochlea Homo	5.15
125757	AI274908	Hs.166835	ESTs, Highly similar to 1814460A p53-ass	5.15
127140	AI273507	Hs.303968	ESTs	5.15
109223	AW000714	Hs.65818	ESTs	5.14
103656	Z73497	Hs.247802	Human D sequence from clone U240C2 on	5.14
133388	AW245631	Hs.182447	heterogeneous nuclear ribonucleoprotein	5.12
100511	M76676	Hs.116840	ESTs	5.10
101841	S77583		gbrHERVK10/HUMMTV reverse transcriptase	5.10
109937	AI084068	Hs.20072	myosin regulatory light chain interactin	5.10
122996	AI436216	Hs.191715	ESTs, Weakly similar to ZN91_HUMAN ZINC	5.10
128242	AA992626	Hs.269755	ESTs, Moderately similar to ALU5_HUMAN A	5.10
112374	NM_016323	Hs.26683	cyclin-E binding protein 1	5.10
124506	BE273688	Hs.182447	heterogeneous nuclear ribonucleoprotein	5.10
104216	AB002313	Hs.3989	plexin B2	5.09
135051	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	5.08
131629	Z45794	Hs.238809	ESTs	5.08
111722	R23924	Hs.23596	EST	5.07
107034	AF257770	Hs.20930	poly(rC)-binding protein 4	5.06
110243	H26683		gbv114g03.s1 Soares breast 2NbH8st Homo	5.05
125837	AW988123	Hs.333513	small inducible cytokine subfamily E, me	5.05
130300	X58288	Hs.154151	protein tyrosine phosphatase, receptor t	5.05
103967	AL120061	Hs.144700	ephrin-B1	5.04
112678	AI418466	Hs.33665	ESTs	5.03
124963	F06600	Hs.101375	Homo sapiens mR; cD DKFZp434H205 (fr	5.03
131379	AK001123	Hs.261176	hypothetical protein FLJ10281	5.03
109451	N32264	Hs.44330	ESTs	5.02
101396	BE267931	Hs.78996	proliferating cell nuclear antigen	5.02
131038	W87778	Hs.169388	hypothetical protein DKFZp761H2024	5.01
101208	L25081	Hs.179735	ras homolog gene family, member C	5.01
104973	NM_015310	Hs.6763	KIAA0942 protein	4.99
103141	X65113	Hs.75584	polymyositis/scleroderma autoantigen 2 (	4.98
111260	AB030305	Hs.51965	KIAA1209 protein	4.98
126142	T67162	Hs.135127	ESTs, Weakly similar to unmed protein	4.98
113857	AW243158	Hs.5297	DKFZP564A2416 protein	4.96
105292	AF128542	Hs.166846	polymerase (D directed), epsilon	4.96
114341	AF270491	Hs.28249	hepatocellular carcinoma-associated anti	4.95
100615	W32474	Hs.301746	RAP2A, member of RAS oncogene family	4.95
103208	AW411340	Hs.31314	retinoblastoma-binding protein 7	4.95
121121	AA399371	Hs.189095	similar to SALL1 (sal (Drosophila)-like	4.95
125321	T86652	Hs.178294	ESTs	4.95
101145	L13210	Hs.79339	lectin, galactoside-binding, soluble, 3	4.95
100551	M73980	Hs.129053	Homo sapiens NOTCH1 (N1) mR, complete	4.93
126182	AA721331	Hs.293771	ESTs	4.93
127925	AA805151	Hs.3628	mitogen-activated protein kinase kinase	4.93
133969	AA669112	Hs.78	GA-binding protein transcription factor,	4.93
120873	AA358015		gb:EST66864 Fetal lung III Homo sapiens	4.92
125219	AI804331	Hs.89423	ATP-dependent R helicase	4.91
102790	BE245277	Hs.154196	E4F transcription factor 1	4.90
129486	NM_005754	Hs.220689	Ras-GTPase-activating protein SH3-domain	4.90
130381	L47345	Hs.155202	transcription elongation factor B (SIII)	4.89
132389	AA310393	Hs.190044	ESTs	4.88
100260	D38491	Hs.322478	KIAA0117 protein	4.88
109585	N59650	Hs.27252	ESTs	4.88
111603	R11529	Hs.20634	EST	4.88
120514	AA258335		gb:zr59b02.s1 Soares_NhHMPu_S1 Homo sapi	4.88
130314	NM_014874	Hs.154332	KIAA0212 gene product	4.86
108958	AF142482	Hs.203846	TEA domain family member 3	4.86
126603	W86610	Hs.185738	ESTs	4.85
100406	AI962060	Hs.118397	AE-binding protein 1	4.85
116238	AV660717	Hs.47144	DKFZP586N0819 protein	4.84
105288	N99673	Hs.3585	ESTs, Weakly similar to AF126743 1 DJ	4.83
118753	AA346206	Hs.50471	ESTs, Weakly similar to T14267 Xin prote	4.82
113070	AB032977	Hs.6288	KIAA1151 protein	4.81
107908	AF087999	Hs.42826	ESTs	4.80
119678	AI658666	Hs.6106	R binding motif protein 4	4.80
100415	D86970	Hs.76822	TGF-beta-induced anti-apoptotic factor 1	4.79
128360	F12374		gb:HSC398101 normalized infant brain cDN	4.78
133101	AK000299	Hs.180952	dycln 4 (p62)	4.78
103507	AJ000512	Hs.296323	serum/glucocorticoid regulated kinase	4.78
107666	AA010611	Hs.60418	EST	4.78
108030	AI378523	Hs.62011	ESTs	4.78
131479	D86181	Hs.273	galactosylceramidase (Krabbe disease)	4.78

5	133140	AF180581	Hs.6582	Rho guanine exchange factor (GEF) 12	4.78
	134654	AK001741	Hs.8739	hypothetical protein FLJ10879	4.78
	108288	AB037742	Hs.24336	KIAA1321 protein	4.76
	101524	NM_000448	Hs.73958	recombination activating gene 1	4.75
	113095	AA828380	Hs.126733	ESTs	4.75
	114924	AI338053	Hs.87329	HSPC072 protein	4.75
	127543	AK000787	Hs.157392	Homo sapiens cD FLJ20780 fts, clone CO	4.75
	115886	AW062829	Hs.52081	KIAA0867 protein	4.75
10	101382	AU078772	Hs.1279	complement component 1, r subcomponent	4.74
	126509	R47400	Hs.23850	ESTs	4.74
	127930	AA809872	Hs.123304	ESTs	4.73
	127824	AI911516	Hs.127811	ESTs	4.73
	110049	H12449	Hs.31159	EST, Weakly similar to ALUB_HUMAN III A	4.73
15	127115	H77859	Hs.65450	resection 4	4.73
	104727	N81203	Hs.20047	zinc finger protein, subfamily 2A (FYVE	4.72
	127532	AJ003429		gb:AJ003429 Selected chromosome 21 cD	4.71
	127304	AF741577	Hs.99962	proteoglycan 2, bone marrow (tural ki	4.70
20	105409	AW505076	Hs.301855	DiGeorge syndrome critical region gene 8	4.70
	114959	AW162998	Hs.24584	KIAA1376 protein	4.70
	115125	AA193588	Hs.85888	ESTs	4.70
	118348	AW408586	Hs.91052	ESTs, Moderately similar to ALU5_HUMAN A	4.70
	123130	AA487200		gb:ab19f02.s1 Stratagene lung (937210) H	4.70
	130881	AA809875	Hs.25933	ESTs	4.70
25	132074	AA478486	Hs.3852	KIAA0358 protein	4.70
	106897	AF039023	Hs.167496	RAN binding protein 6	4.69
	131121	AA120865	Hs.23136	ESTs	4.69
	116046	BE395293	Hs.94491	hypothetical protein FLJ20297	4.68
	112868	AW388359	Hs.10667	ESTs	4.68
30	116877	AA708958	Hs.168732	ESTs	4.68
	131241	BE501914	Hs.24654	Homo sapiens cD FLJ11640 fts, clone HE	4.68
	132027	AF151020	Hs.181444	hypothetical protein	4.68
	133323	BE336654	Hs.70837	H3 histone family, member A	4.68
	114269	AA176769	Hs.23450	mitochondrial ribosomal protein S25	4.67
35	122713	AI089443	Hs.99438	ESTs	4.67
	133571	BE515037	Hs.177556	melanoma antigen, family D, 1	4.66
	134453	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	4.66
	115510	BE299339	Hs.72249	three-PDZ containing protein similar to	4.66
	115322	L08895	Hs.78995	MADS box transcription enhancer factor 2	4.66
40	129315	NM_014563	Hs.174038	spondyloepiphyseal dysplasia, late	4.65
	104674	AI935862	Hs.26289	ESTs	4.65
	106276	AA625947	Hs.25750	ESTs	4.65
	108216	AA524743	Hs.44883	ESTs	4.65
	120376	AA227469		gb:zr18a07.s1 Stratagene NT2 neuro pr	4.65
45	121743	AA397636		gb:zr79e09.r1 Soares_testis_NHT Homo sap	4.65
	128011	AI347087	Hs.124836	ESTs	4.65
	123454	AA868510	Hs.112496	ESTs	4.64
	103409	NM_004454	Hs.43697	ets variant gene 5 (ets-related molecule	4.64
	120484	AA253170	Hs.96473	EST	4.63
50	127046	AA321948	Hs.293968	ESTs	4.63
	133184	AA001021	Hs.6685	thyroid hormone receptor interactor 8	4.63
	123184	BE247767	Hs.18166	KIAA0870 protein	4.62
	106627	AK000706	Hs.15125	hypothetical protein FLJ20699	4.61
55	115476	AB033085	Hs.40193	hypothetical protein KIAA1259	4.61
	119468	AI911535	Hs.6657	hypothetical protein bK1048E9.5	4.59
	133662	BE409053	Hs.299629	peroxisomal long-chain acyl-coA thioeste	4.58
	113941	AA531018	Hs.22399	hypothetical protein FLJ14824	4.58
	131590	R46277	Hs.250638	Homo sapiens mR full length insert cDN	4.58
	128795	AA531287	Hs.105805	ESTs	4.58
60	116480	C14088	Hs.169476	glyceraldehyde-3-phosphate dehydrogese	4.58
	111713	C75253	Hs.220950	ESTs	4.58
	113721	AF143885	Hs.18190	EST	4.57
	111657	R07364	Hs.268667	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.56
	102009	BE245149	Hs.82643	protein tyrosine kinase 9	4.55
65	135242	AI583187	Hs.9700	cyclin E1	4.55
	127580	BE548749	Hs.148016	ESTs	4.55
	109785	AB011131	Hs.12376	piccolo (presynaptic cytomatrix protein)	4.53
	109700	F09809		gb:HSC33H092 normalized infant brain cDN	4.53
	124882	AI698652	Hs.101539	ESTs	4.53
70	131765	AW381270	Hs.194110	hypothetical protein PRO2730	4.53
	115584	NM_006577	Hs.284284	ESTs, Highly similar to beta-1,3-N-acety	4.52
	102034	AI903474	Hs.230	fibromodulin	4.52
	109776	R43665	Hs.12257	ESTs	4.50
	111650	R16722	Hs.124246	ESTs	4.50
75	132993	AB023154	Hs.62264	KIAA0937 protein	4.49
	129017	AA115333	Hs.107958	ESTs	4.49
	132902	AI938442	Hs.59838	hypothetical protein FLJ10808	4.48
	114814	AB006622	Hs.182536	KIAA0284 protein	4.48
	120839	AA348913		gb:EST55442 Infant adrenal gland II Homo	4.48
80	101434	AV650068	Hs.1430	coagulation factor XI (plasma thrombopla	4.48
	102018	U03398	Hs.1524	tumor necrosis factor (ligand) superfam	4.48
	104619	AA001635	Hs.287414	transcriptol intermediary factor 1 ga	4.48
	105716	AA931198	Hs.238928	HT002 protein; hypertension-related calc	4.48
	126020	H79883	Hs.114243	ESTs	4.48

5	119899	A057404	Hs.58698	ESTs	4.47
	115582	AW245047	Hs.136164	cutaneous T-cell lymphoma-associated tum	4.46
	125695	W22529	Hs.30942	ephrin-B2	4.46
	105715	BE621800	Hs.29444	putative small membrane protein NID67	4.45
	117169	R87666	Hs.95120	ESTs, Weakly similar to H2HU hemoglobin	4.45
	102757	AW955454	Hs.30942	ephrin-B2	4.45
	120637	AA811804		gbxb39a05.s1 NCL_CGAP_GCB1 Homo sapiens	4.45
	131579	N62922	Hs.29088	ESTs	4.45
10	135287	U82670	Hs.9786	zinc finger protein 275	4.45
	112540	R69751		gbv40a10.s1 Soares placenta Nb2HP Homo	4.45
	125724	AL360190	Hs.295978	Homo sapiens mR full length insert cDN	4.44
	115498	AA291070		gbzs48a08.s1 NCL_CGAP_GCB1 Homo sapiens	4.43
	102263	U29171	Hs.75852	casein kise 1, delta	4.43
15	124312	H94647	Hs.102329	ESTs	4.43
	112366	AF035318	Hs.12533	Homo sapiens clone 23705 mR sequence	4.43
	115955	AF283813	Hs.44198	Intracellular membrane-associated calciu	4.43
	103562	NM_002702	Hs.2815	POU domain, class 6, transcription facto	4.42
	100169	AL037228	Hs.82043	D123 gene product	4.40
20	108928	AA143802	Hs.71781	ESTs	4.40
	125908	AF255555	Hs.250646	baculoviral IAP repeat-containing 6	4.40
	126996	BE161065	Hs.167531	methylcrotonyl-Coenzyme A carboxylase 2	4.40
	129512	T88845	Hs.112200	ESTs, Weakly similar to ALU7_HUMAN ALU S	4.40
	134570	U66615	Hs.172280	SW/SNF related, matrix associated, acti	4.40
25	135073	W55966	Hs.94030	Homo sapiens mR; cD DKFZp566E1624 (f	4.40
	105011	BE091926	Hs.16244	mitotic spindle coiled-coil related prot	4.40
	128793	AB011125	Hs.105749	KIAA0563 protein	4.40
	107292	BE168479	Hs.4789	Homo sapiens serologically defined breas	4.38
	126144	H84455	Hs.40639	ESTs	4.38
30	130783	X07282	Hs.171496	retinoic acid receptor, beta	4.38
	135192	U83993	Hs.321709	purinergic receptor P2X, ligand-gated io	4.38
	100284	D43767	Hs.66742	small inducible cytokine subfamily A (Cy	4.37
	117269	N21621	Hs.91142	KH-type splicing regulatory protein (FUS	4.36
	104261	AW248364	Hs.5409	R polymerase 1 subunit	4.35
35	108609	BE409657	Hs.69499	hypothetical protein	4.35
	126319	D81689		gb:HUM184E058 Human fetal brain (TFujiwa	4.35
	127445	AA906286	Hs.193942	ESTs	4.35
	130772	BE270640	Hs.19192	cyclin-dependent kise 2	4.35
	134625	AA977638	Hs.184389	ESTs	4.35
40	135397	L14922	Hs.166563	replication factor C (activator 1) 1 (14	4.35
	128070	AA886944	Hs.303908	ESTs	4.35
	135046	AI494054	Hs.93589	hypothetical protein DKFZp564B1162	4.33
	101881	NM_004957	Hs.754	folypolyglutamate synthase	4.33
	129838	AB007863	Hs.185140	KIAA0403 protein	4.33
45	130974	NM_003528	Hs.2178	H2B histone family, member Q	4.33
	107763	AA018220	Hs.106730	chromosome 22 open reading frame 3	4.32
	129818	T71092	Hs.172572	hypothetical protein FLJ22093	4.31
	129407	AL137597	Hs.11114	hypothetical protein dJ1181N3.1	4.30
	110846	BE277343	Hs.297875	endoplasmic reticulum chaperone SIL1, ho	4.30
50	111433	R01452	Hs.40193	hypothetical protein KIAA1259	4.30
	114860	AL157545	Hs.42179	bromodomain and PHD finger containing, 3	4.30
	115853	AW978561	Hs.191548	ESTs	4.30
	116165	AI184751	Hs.75874	pregnancy-associated plasma protein A	4.30
	126911	AA428049	Hs.1501	syndecan 2 (heparan sulfate proteoglycan	4.30
55	131230	NM_005865	Hs.274407	protease, serine, 16 (thymus)	4.30
	100349	D64110	Hs.77311	BTG family, member 3	4.29
	100175	BE258769	Hs.32500	acetyl-Coenzyme A acyltransferase 2 (mit	4.29
	105335	AW291165	Hs.25447	ESTs	4.29
	122507	BE567620	Hs.99210	ESTs	4.28
60	105397	AA814807	Hs.7395	hypothetical protein FLJ23182	4.28
	133674	AW851121	Hs.75497	Homo sapiens cD: FLJ22139 fis, clone H	4.28
	102826	NM_007274	Hs.8679	cytosolic acyl coenzyme A thioester hydr	4.28
	103272	NM_006680	Hs.2838	malic enzyme 3, DP(+)-dependent, mitoc	4.28
	111887	R38635	Hs.12328	KIAA1005 protein	4.28
65	120338	N85785	Hs.181165	eukaryotic translation elongation factor	4.28
	133738	D49958	Hs.75819	glycoprotein M6A	4.28
	130356	AF127577	Hs.155017	nuclear receptor interacting protein 1	4.27
	119630	AW054922	Hs.53478	Homo sapiens cD FLJ12366 fis, clone MA	4.27
	108758	AB014564	Hs.22618	KIAA0664 protein	4.25
70	109709	F09749	Hs.187405	ESTs	4.25
	110463	H52931	Hs.165067	ESTs	4.25
	124472	N52617	Hs.102670	EST	4.25
	109770	R40322	Hs.248420	ESTs, Moderately similar to A47582 B-cel	4.24
	131487	F13036	Hs.27373	Homo sapiens mR; cD DKFZp564O1763 (f	4.23
75	107218	D51069	Hs.211579	melanoma cell adhesion molecule	4.23
	123562	AA177088	Hs.190085	ESTs	4.23
	125988	W02410	Hs.205555	ESTs	4.23
	126221	N20514	Hs.172965	ESTs	4.23
	127092	T26985		gb:NIBT065H01R Infant brain, LLNL array	4.23
80	132349	AW975654	Hs.181288	serine protease inhibitor, Kazal type 1	4.23
	118948	N92834		gbzb6703.s1 Soares_fetal_Jung_NbHL19W	4.22
	101531	AI199711	Hs.578	fructosidase, alpha-L- 1, tissue	4.21
	105322	T87179	Hs.16348	ESTs, Weakly similar to S57447 HPBR11-7	4.21
	104219	AB002323	Hs.7720	dynein, cytoplasmic, heavy polypeptide 1	4.20



5	102825	BE262388	Hs.7137	clones 23667 and 23776 zinc finger prote	4.20
	103571	AI675749	Hs.211608	nucleoporin 153kD	4.20
	106942	AA995351	Hs.31314	retinoblastoma-binding protein 7	4.20
	112685	R87650	Hs.33439	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.20
	123107	AA225048	Hs.104207	ESTs	4.20
	132659	Z75190	Hs.54481	low density lipoprotein receptor-related	4.20
	130084	AI929377	Hs.173724	creatine kinase, brain	4.19
	114553	BE219860	Hs.22505	hypothetical protein FLJ10159	4.18
10	129628	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (ma	4.18
	102266	U29725	Hs.3080	mitogen-activated protein kinase 7	4.18
	110637	AI241470	Hs.268982	ESTs	4.18
	127520	T51239		gb:yb20d12.s1 Stratagene fetal spleen (9	4.18
	130322	NM_014247	Hs.154545	PDZ domain containing guanine nucleotide	4.17
	104768	D82319	Hs.11056	RALBP1 protein	4.17
15	123360	AA532718	Hs.178604	ESTs	4.17
	133110	AA808177	Hs.65228	ESTs	4.16
	130923	H96115	Hs.21293	UDP-N-acetylglucosamine pyrophosphorylas	4.16
	109878	BE620775	Hs.4866	Homo sapiens cD FLJ14387 fs, clone HE	4.16
20	119265	BE539708	Hs.285363	ESTs	4.16
	124214	H58608	Hs.151323	ESTs	4.15
	106193	AA057478	Hs.23272	ESTs	4.15
	105169	BE246294	Hs.180789	S164 protein	4.15
	132304	AA610002	Hs.44296	hypothetical protein FLJ22324	4.15
25	131600	NM_004377	Hs.29331	carbamate palmitoyltransferase I, muscle	4.14
	131365	M93415	Hs.26014	activin A receptor, type II	4.14
	121993	AW297880	Hs.98661	ESTs	4.14
	110779	AI391472	Hs.12581	ESTs, Highly similar to C212_HUMAN 28.3	4.13
	126383	AB032977	Hs.6298	KIAA1151 protein	4.13
30	104446	AF084555	Hs.7351	cyclic AMP phosphoprotein, 19 kD	4.13
	131475	AA992841	Hs.27263	KIAA1458 protein	4.13
	128933	NM_002050	Hs.334695	GATA-binding protein 2	4.12
	113141	AI493278	Hs.9187	ESTs	4.11
	134833	L20965	Hs.89901	phosphodiesterase 4A, cAMP-specific (dun	4.11
35	106461	AI630759	Hs.17481	Homo sapiens clone 24606 mR sequence	4.10
	128058	AI990131	Hs.276973	potassium large conductance calcium-acti	4.10
	114757	AW970579	Hs.291031	ESTs	4.10
	134653	AI765883	Hs.87385	ESTs	4.09
40	100472	D90084	Hs.1023	pyruvate dehydrogenase (lipoamide) alpha	4.08
	103102	X61177	Hs.68876	interleukin 5 receptor, alpha	4.08
	106779	BE276013	Hs.172364	Homo sapiens mR for FLJ00086 protein,	4.08
	133815	M62843	Hs.75236	ELAV (embryonic lethal, abnormal vision,	4.08
	130178	U20982	Hs.1516	insulin-like growth factor-binding prote	4.07
	124659	AI680737	Hs.289068	Homo sapiens cD FLJ11918 fs, clone HE	4.07
45	127861	AW265020	Hs.198529	ESTs	4.07
	112129	AB037715	Hs.183639	hypothetical protein FLJ10210	4.07
	100918	AK001335	Hs.31137	protein tyrosine phosphatase, receptor I	4.06
	124677	R10173		gb:ye84c03.s1 Soares fetal liver spleen	4.05
	102722	F13271	Hs.79981	Human clone 23560 mR sequence	4.05
50	111117	AB037721	Hs.173871	KIAA1300 protein	4.05
	122506	AA449120	Hs.99209	ESTs	4.05
	126392	AI356294	Hs.3280	caspase 6, apoptosis-related cysteine pr	4.05
	130760	AW379130	Hs.18953	phosphodiesterase 9A	4.05
	104220	AB002324	Hs.301094	KIAA0326 protein	4.05
55	112774	R95770	Hs.35455	ESTs	4.04
	111128	AW505364	Hs.18074	LATS (large tumor suppressor, Drosophila	4.04
	113146	BE151985	Hs.5722	hypothetical protein FLJ23316	4.04
	124940	AF088846	Hs.103804	heterogeneous nuclear ribonucleoprotein	4.03
	105498	H68279	Hs.24937	transformer-2 alpha (htra-2 alpha)	4.03
60	112631	R82040		gb:yl06b06.s1 Soares placenta Nb2HP Homo	4.03
	118244	N62518	Hs.48556	ESTs	4.03
	118720	N73515		gb:za49d07.s1 Soares fetal liver spleen	4.03
	129232	R98881	Hs.109655	sex comb on mldieg (Drosophila)-like 1	4.03
	134192	H01345	Hs.24139	Homo sapiens cD: FLJ23137 fs, clone L	4.03
65	131893	BE336886	Hs.3416	adipose differentiation-related protein	4.02
	116793	T77781		gb:yd20a11.s1 Soares fetal liver spleen	4.02
	125674	AL036166	Hs.323378	coated vesicle membrane protein	4.01
	116640	X89884	Hs.211563	B-cell CLL/lymphoma 7A	4.01
	105057	AA134233	Hs.336942	Homo sapiens cD: FLJ21488 fs, clone C	4.00
70	105158	AW976357	Hs.234545	hypothetical protein NUF2R	4.00
	116245	AB033107	Hs.42795	KIAA1281 protein	4.00
	119946	AA932283	Hs.58925	ESTs	4.00
	121975	AA740679	Hs.98631	ESTs	4.00
	132037	AA352702	Hs.332541	Homo sapiens, Similar to RIKEN cD 2700	4.00
75	133669	NM_006925	Hs.166975	splicing factor, arginine/serine-rich 5	4.00
	109468	NM_015310	Hs.6763	KIAA0942 protein	3.99
	106829	AW959893	Hs.27099	hypothetical protein FLJ23293 similar to	3.99
	134682	AW882845	Hs.88044	sprouty (Drosophila) homolog 1 (antagoni	3.98
	105966	AA142984	Hs.5344	adaptor-related protein complex 1, gamma	3.98
	100448	AF234887	Hs.57652	cadherin, EGF LAG seven-pass G-type rece	3.98
80	102589	AU076728	Hs.8867	cysteine-rich, angiogenic inducer, 61	3.98
	104146	AW880614	Hs.146381	R binding motif protein, X chromosome	3.98
	111465	AI988256	Hs.15470	putative ring zinc finger protein NY-REN	3.98
	126499	AK001779	Hs.110445	CGI-97 protein	3.98

5	134388	AW405434	Hs.82575	small nuclear ribonucleoprotein polypept	3.98
	105564	BE616694	Hs.288042	hypothetical protein FLJ14259	3.97
	115208	AW183695	Hs.186572	ESTs	3.96
	103853	AF272390	Hs.111782	myosin 5C	3.96
	110542	H58373	Hs.332938	hypothetical protein MGC5370	3.96
	106797	AI768801	Hs.169943	Homo sapiens cD FLJ13569 fis, clone PL	3.98
	130589	AL110226	Hs.16441	DKFZP434H204 protein	3.96
	122788	AI828838	Hs.99514	hypothetical protein FLJ20574	3.95
10	104518	H20816	Hs.112423	Homo sapiens mR; cD DKFZp5861420 (f	3.95
	130840	NM_004753	Hs.17144	short-chain dehydrogenase/reductase 1	3.95
	110847	N30169	Hs.278807	ESTs, Weakly similar to 2004399A chromos	3.95
	116156	AA461045	Hs.50701	ESTs	3.95
	122096	AA431162	Hs.88690	ESTs	3.95
15	122160	AF769281	Hs.97439	ESTs	3.95
	123930	AA740878	Hs.112982	ESTs	3.96
	126280	Z19417		gb:HSB268122 STRATAGENE Human skeletal m	3.95
	126547	U47732	Hs.84072	transmembrane 4 superfamily member 3	3.95
	134757	AA913267	Hs.211576	IL2-inducible T-cell kiso	3.95
20	117296	AL133427	Hs.42506	Homo sapiens mR full length insert cDN	3.95
	112261	AL050297	Hs.300861	ESTs, Highly similar to T08701 hypotheti	3.95
	112268	W39609	Hs.22003	solute carrier family 6 (neurotransmitte	3.94
	131844	AI419294	Hs.324342	ESTs	3.94
	101607	X60111	Hs.1244	CD9 antigen (p24)	3.94
25	121613	AA416879	Hs.193195	ESTs, Weakly similar to 2109260A B cell	3.93
	115815	AW905328	Hs.180842	ribosomal protein L13	3.93
	125684	AW589427	Hs.158849	Homo sapiens cD: FLJ21663 fis, clone C	3.93
	126783	AA083531		gb:zn09d10.s1 Stratagene hNT neuron (937	3.93
	129201	H18359	Hs.109390	ESTs	3.93
30	128954	AA346839	Hs.209100	DKFZP434C171 protein	3.92
	122939	AA477141		gb:zu37g06.s1 Soares ovary tumor NbHOT H	3.92
	130348	AB032957	Hs.210850	KIAA1131 protein	3.92
	126847	AW161885	Hs.249034	ESTs	3.91
	120452	AL023328	Hs.104335	hypothetical protein IMAGE3510317	3.91
35	123143	AA487595		gb:aa95e02.s1 Stratagene fetal red 93	3.91
	105729	H46612	Hs.293815	Homo sapiens HSPC285 mR, partial cds	3.91
	106605	AW772298	Hs.21103	Homo sapiens mR; cD DKFZp564B076 (fr	3.90
	126714	AF114491	Hs.137354	egl-like module containing, mucin-like,	3.90
	121611	M31669	Hs.1735	inhibin, beta B (activin AB beta polypep	3.90
40	120468	AW967675	Hs.96487	ESTs, Highly similar to S08228 ribosomal	3.90
	101356	AW878229	Hs.80842	sig1 transducer and activator of trans	3.89
	133668	L77984	Hs.271980	mitogen-activated protein kiso 6	3.89
	109114	BE622787	Hs.84045	hypothetical protein FLJ20288	3.88
	115134	AW968073	Hs.194331	ESTs, Highly similar to A55713 inositol	3.88
45	107850	AA022910	Hs.265446	ESTs, Moderately similar to 810024C cyto	3.88
	130907	AA328666	Hs.21107	neurotigin	3.88
	101879	AA176374	Hs.243886	nuclear autoantigenic sperm protein (his	3.88
	104267	AF043244	Hs.278439	nucleolar protein 3 (apoptosis repressor	3.88
	112232	BE253927	Hs.24983	hypothetical protein from EUROMAGE 2021	3.88
50	113248	T63857		gb:yc16e01.s1 Stratagene lung (937210) H	3.88
	114044	BE327427	Hs.78953	ESTs	3.88
	115414	AA662240	Hs.283099	AF15q14 protein	3.88
	129598	N30436	Hs.11656	Homo sapiens cD FLJ12566 fis, clone NT	3.88
	102134	AL036967	Hs.2324	protamine 2	3.87
55	108310	F98185	Hs.17240	ESTs	3.87
	116470	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	3.86
	110947	AW298410	Hs.21475	ESTs	3.85
	115839	BE300266	Hs.28935	transducin-like enhancer of split 1, hom	3.85
	103534	AW970872	Hs.9247	protein kiso, AMP-activated, alpha 1 c	3.85
60	105209	AB023197	Hs.227743	KIAA0980 protein	3.85
	108749	AA127017	Hs.71052	ESTs	3.85
	110585	AI884970	Hs.4983	ESTs	3.85
	110799	AI089660	Hs.323401	dpy-30-like protein	3.85
	117068	H91257	Hs.41391	EST	3.85
65	130856	NM_001135		aggrecan 1 (chondroitin sulfate proteogl	3.85
	102273	BE391815	Hs.2159	ubiquitin specific protease 14 (IR-gua	3.85
	112960	AL110209	Hs.75981	LCAT-like lysophospholipase	3.84
	114414	AW152166	Hs.182113	ESTs	3.84
	109865	AA249439	Hs.27027	hypothetical protein DKFZp762H1311	3.84
70	106208	AK001674	Hs.22630	cofactor required for Sp1 transcrip	3.84
	122311	NM_014913	Hs.131915	KIAA0883 protein	3.84
	124271	AW283223	Hs.6928	hypothetical protein FLJ20291	3.83
	106650	ALD49951	Hs.22370	Homo sapiens mR; cD DKFZp564O0122 (f	3.83
	112187	N99591	Hs.25587	ESTs, Weakly similar to T00329 hypotheti	3.83
75	122354	AL157579	Hs.153610	KIAA0751 gene product	3.83
	111462	R05296		gb:ye91e08.s1 Soares fetal liver spleen	3.81
	128109	AW269421	Hs.128093	ESTs	3.81
	127003	AW816515	Hs.173540	ATPase, Class V, type 10D	3.81
	109210	AA669722	Hs.272137	ESTs	3.81
80	132543	BE568452	Hs.5101	protein regulator of cytokinesis 1	3.80
	106827	AA457456	Hs.11408	hypothetical protein FLJ20435	3.80
	124232	H63391	Hs.339877	ESTs, Weakly similar to I38022 hypotheti	3.80
	126039	AL137523	Hs.181102	p30 DBC protein	3.80
	128022	AW196569	Hs.125906	ESTs	3.80

5	132005	AA149707	Hs.173091	ubiquitin-like 3	3.79
	131392	AA235153	Hs.26320	TRABID protein	3.79
	131775	AB014548	Hs.31921	KIAA0648 protein	3.79
	126257	N99538		gb:za39g11.1 Soares fetal liver spleen	3.79
	121950	AA429515		gb:zw75c05.s1 Soares_testis_NHT Homo sap	3.79
	116067	AA454827	Hs.293637	ESTs	3.78
	104658	AA360954	Hs.27268	Homo sapiens cD: FLJ21933 fs, clone H	3.78
	104493	AW950427	Hs.79059	transforming growth factor, beta recepto	3.77
10	100163	W44671	Hs.124	gene predicted from cD with a complete	3.77
	116223	AF045458	Hs.47061	unc-51 (C. elegans)-like kinase 1	3.77
	120586	AL031778	Hs.797	nuclear transcription factor Y, alpha	3.76
	128764	AW024282	Hs.104938	hypothetical protein MGC15906	3.75
	111574	AI024145	Hs.188528	ESTs	3.75
15	117396	W20128	Hs.296039	ESTs	3.75
	119052	R10889		gb:yc38d02.s1 Soares fetal liver spleen	3.75
	121806	AA424313	Hs.98402	ESTs	3.75
	122410	AA446854	Hs.271004	ESTs, Weakly similar to I38022 hypothe	3.75
	126638	AA649257	Hs.188602	ESTs	3.75
20	127879	AA768098	Hs.189079	ESTs	3.75
	121095	AA320134	Hs.196029	Homo sapiens mRNA for KIAA1657 protein,	3.76
	103430	BE584090	Hs.20716	translocase of inner mitochondrial membr	3.74
	101230	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	3.74
	100200	H94688	Hs.173737	ras-related C3 botulinum toxin substrate	3.73
25	106913	AI219346	Hs.68178	M-phase phosphoprotein 9	3.73
	110975	H17012	Hs.14633	ESTs	3.73
	117314	N32498	Hs.42829	ESTs	3.73
	118737	AA199586		gb:zq75g09.r1 Stratagene hNT neuron (937	3.73
	124169	BE079334	Hs.271630	ESTs	3.73
30	124580	N68420	Hs.107992	ESTs	3.73
	125747	NM_002884	Hs.865	RAP1A, member of RAS oncogene family	3.73
	124879	R73588	Hs.101533	ESTs	3.72
	128527	AA504583	Hs.101047	transcription factor 3 (E2A immunoglobul	3.72
	103644	M13305	Hs.247787	opsin 1 (cone pigments), long-wave-sensi	3.72
35	106044	N90344	Hs.149436	kinesin family member 58	3.71
	127867	C18530		gb:C18530 Human placenta cD (TFUJ)wara	3.71
	133828	T28472	Hs.7655	U2 small nuclear ribonucleoprotein auxil	3.71
	107387	D86983	Hs.118893	Melanoma associated gene	3.71
	104160	AA455706	Hs.44581	heat shock protein hsp70-related protein	3.71
40	106098	BE278344	Hs.7970	DKFZP434B027 protein	3.70
	133691	M85289	Hs.211573	heparan sulfate proteoglycan 2 (perlecan	3.70
	120717	AA904581	Hs.154434	ESTs, Weakly similar to unknown [H.sapie	3.70
	119263	T15977		gb:182328 Infant brain, Benito Soares Hom	3.70
	102305	AL043202	Hs.90073	chromosome segregation 1 (yeast homolog)	3.70
45	106566	BE298210		gb:501118016F1 NIH_MGC_17 Homo sapiens c	3.70
	110708	N33878	Hs.306117	KIAA0306 protein	3.70
	114357	R41677	Hs.8107	Homo sapiens cD FLJ14839 fs, clone OV	3.70
	115285	AW972872	Hs.293736	ESTs	3.70
	123034	AL359571	Hs.44054	nuclein (GSK3B interacting protein)	3.70
50	126396	T06288	Hs.153328	EST	3.70
	132597	Y11182	Hs.5299	aldehyde dehydrogenase 5 family, member	3.70
	105823	AI599444	Hs.293960	ESTs	3.70
	102644	T59816	Hs.173311	C18B11 homolog (44.9kD)	3.70
	133513	AF136407	Hs.7446	chromosome 6 open reading frame 5	3.70
55	116450	AI654450	Hs.47274	Homo sapiens mRNA, cD DKFZp584B176 (fr	3.69
	104596	AF067804	Hs.16423	hypothetical protein HDCMC04P	3.69
	133579	X75346	Hs.75074	mitogen-activated protein kinase-activat	3.68
	124556	N29317	Hs.236463	Homo sapiens mRNA, cD DKFZp586I0521 (f	3.68
	120534	AI635113	Hs.270368	ESTs, Weakly similar to I78885 serine/th	3.68
60	103156	BE259039	Hs.129953	Ewing sarcoma breakpoint region 1	3.68
	134992	AA464444	Hs.5831	tissue inhibitor of metalloproteinase 1	3.68
	106730	BE467313	Hs.260707	ESTs	3.68
	120880	AA360240	Hs.97019	EST	3.68
	123731	AA609839		gb:ae6201.s1 Stratagene lung carcinoma	3.68
65	126973	W48653	Hs.251928	nuclear pore complex interacting protein	3.67
	103646	AW248439	Hs.2340	junction plakoglobin	3.67
	116333	AF155827	Hs.203963	hypothetical protein FLJ10339	3.67
	120922	AA481003	Hs.87128	ESTs	3.67
	127407	AW089514	Hs.279681	heterogeneous nuclear ribonucleoprotein	3.67
70	106578	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	3.67
	123000	AI584156	Hs.105640	Homo sapiens, clone IMAGE:4139775, mRNA,	3.67
	101464	AA852431	Hs.51299	DH dehydrogenase (ubiquinone) flavopro	3.67
	101397	M26380	Hs.180878	lipoprotein lipase	3.67
	131135	NM_016569	Hs.267182	TBX3-iso protein	3.66
75	106112	AL117518	Hs.3688	KIAA0978 protein	3.66
	123974	NM_015678	Hs.3821	neurobeachin	3.66
	127742	AW293496	Hs.180138	ESTs	3.66
	112908	BE281000	Hs.3530	TLS-associated serine-arginine protein 2	3.66
	131802	AL137406	Hs.296358	Homo sapiens mRNA, cD DKFZp434M162 (fr	3.65
80	135162	AI187925	Hs.85667	F-box protein 30	3.65
	124984	BE313210	Hs.223241	eukaryotic translation elongation factor	3.65
	118844	AL035364	Hs.50891	hypothetical protein	3.65
	125449	AI023554	Hs.114191	ESTs	3.65
	125598	R25698		gb:yg44h11.2 Soares infant brain INIB H	3.65

5	125792	AA436205	Hs.193700	Homo sapiens miR; cD DKFZp586i0324 (f	3.65
	126965	AI470523	Hs.139336	ATP-binding cassette, sub-family C (CFTR	3.65
	130776	AF167706	Hs.19280	cysteine-rich motor neuron 1	3.65
	131949	AK000010	Hs.258798	hypothetical protein FLJ20003	3.65
	116612	C14904	Hs.45184	Homo sapiens cD FLJ12284 fts, clone MA	3.65
	123749	AA609949	Hs.112790	EST	3.65
	134203	AA161219	Hs.799	diphtheria toxin receptor (heparin-bind	3.64
	133605	AL038165	Hs.75187	translocase of outer mitochondrial membr	3.64
10	109235	AI381800	Hs.300684	calcitonin gene-related peptide-receptor	3.64
	125447	AI582222	Hs.128686	ESTs	3.63
	122942	AI277829	Hs.111862	KIAA0590 gene product	3.63
	122748	AA458822	Hs.193815	ESTs	3.63
	103840	AW975861	Hs.47387	KIAA1785 protein	3.63
15	105333	AA234831	Hs.246112	KIAA0788 protein	3.63
	108807	AI652236	Hs.49376	hypothetical protein FLJ20644	3.63
	114699	AA127386		gb:zn90d09.r1 Stratagene lung carcinoma	3.63
	126040	Z28444	Hs.24119	Homo sapiens miR; cD DKFZp586G2222 (f	3.63
	131028	AI879165	Hs.2227	CCAAT/enhancer binding protein (C/EBP),	3.63
	131710	NM_015368	Hs.30985	pannexin 1	3.63
20	100164	AW372032	Hs.173714	MORF-related gene X	3.62
	120837	BE149656	Hs.306621	Homo sapiens cD FLJ11963 fts, clone HE	3.62
	131089	Z42645	Hs.22870	Homo sapiens miR full length insert cDN	3.62
	126428	AA412436	Hs.301985	ESTs	3.62
25	129148	AW501216	Hs.108945	KIAA0515 protein	3.61
	102337	AI814663	Hs.170133	forkhead box O1A (rhabdomyosarcoma)	3.61
	104520	AI702384	Hs.76925	hypothetical protein FLJ14981	3.60
	112954	AA928953	Hs.6655	Homo sapiens EST from clone 208499, full	3.60
	125197	AF085270	Hs.278554	heterochromatin-like protein 1	3.60
30	128124	AI125748	Hs.130194	ESTs	3.60
	129553	AW015763	Hs.113065	ESTs	3.60
	123998	AA203429	Hs.79474	tyrosine 3-monooxygenase/tryptophan 5-mo	3.60
	128835	AK001731	Hs.106390	Homo sapiens miR; cD DKFZp586H0924 (f	3.59
	129226	BE222494	Hs.180919	inhibitor of D binding 2, dominant neg	3.59
35	135131	AI582743	Hs.94953	Homo sapiens, Similar to complement comp	3.59
	128955	AA775076	Hs.185807	Homo sapiens, Similar to PRO0478 protein	3.58
	100225	D28539	Hs.167185	glutamate receptor, metabotropic 5	3.58
	101572	AA437199	Hs.656	cell division cycle 25C	3.58
	102277	U31099	Hs.158328	prostaglandin D2 receptor (DP)	3.58
40	103667	Z80788	Hs.247815	H4 histone family, member L	3.58
	112373	AW963357	Hs.7847	ESTs	3.58
	119284	AL041224	Hs.65379	ESTs	3.58
	125422	AA903229	Hs.153717	ESTs	3.58
	126381	M76665	Hs.275215	hydroxysteroid (11-beta) dehydrogenase 1	3.58
45	129168	AI132988	Hs.109052	chromosome 14 open reading frame 2	3.58
	123133	AA487264	Hs.154974	Homo sapiens miR; cD DKFZp567N064 (fr	3.57
	128789	AW368576	Hs.139851	caveolin 2	3.57
	104172	AA478418		gb:zcd2a12.s1 Soares_tetal_fetus_Nb2HF8_	3.57
50	134263	AW973443	Hs.8086	R (guanine-7-) methyltransferase	3.57
	101759	M80244	Hs.184601	solute carrier family 7 (cationic amino	3.57
	104942	NM_016348	Hs.10235	chromosome 5 open reading frame 4	3.56
	123443	BE244537	Hs.167382	triuretic peptide receptor A/guanylate	3.56
	110707	AI239832	Hs.15617	ESTs, Weakly similar to ALU4_HUMAN ALU S	3.55
	106787	AI492261	Hs.32450	ESTs	3.55
55	112940	AK001757	Hs.281348	hypothetical protein FLJ10895	3.55
	115301	T11832	Hs.127797	Homo sapiens cD FLJ11381 fts, clone HE	3.55
	125978	N88843	Hs.35608	ESTs	3.55
	128002	AI985897	Hs.125293	ESTs	3.55
	119847	H81136	Hs.334604	Homo sapiens miR for KIAA1870 protein,	3.55
60	134595	NM_002401	Hs.29282	mitogen-activated protein kinase	3.55
	121309	AA293834	Hs.97312	ESTs	3.54
	122579	AA811286	Hs.192837	ESTs, Weakly similar to ALU5_HUMAN ALU S	3.54
	106061	AA565358	Hs.13250	ESTs	3.54
	127207	AA377165	Hs.44833	ESTs	3.54
65	129583	AF119664	Hs.27299	transcriptional regulator protein	3.54
	105951	R48700	Hs.20733	Homo sapiens cD: FLJ22358 fts, clone H	3.53
	115643	AA404276	Hs.123253	hypothetical protein FLJ22009	3.53
	130473	U11690	Hs.1572	faciogenital dysplasia (Aarskog-Scott sy	3.53
	104246	AF016032	Hs.201377	lysosomal	3.53
70	120562	BE244580	Hs.302267	hypothetical protein FLJ10330	3.53
	101211	AA355357	Hs.283429	SMC (mouse) homolog, X chromosome	3.53
	100774	J05581	Hs.89603	mucin 1, transmembrane	3.53
	108407	AA075519		gb:zmr87h09.s1 Stratagene ovarian cancer	3.53
	113538	AI554947	Hs.15167	ESTs, Weakly similar to S37482 finger pr	3.53
75	113876	AI799751	Hs.5635	ESTs	3.53
	110731	NM_014899	Hs.188006	KIAA0878 protein	3.52
	125845	AK001440	Hs.131840	hypothetical protein FLJ10578	3.51
	112945	AW138458	Hs.20787	Homo sapiens cD: FLJ21686 fts, clone C	3.51
	131686	NM_012296	Hs.30687	GRB2-associated binding protein 2	3.51
80	125413	AI887951	Hs.74566	dihydropyrimidine-like 3	3.51
	128360	AJ000534	Hs.110708	sarcoglycan, epsilon	3.50
	128819	R39007	Hs.77578	ubiquitin specific protease 9, X chromos	3.50
	101973	U41514	Hs.80120	UDP-N-acetyl-alpha-D-galactosamine:polyp	3.50
	103616	NM_002647	Hs.32971	phosphoinositide-3-kinase, class 3	3.50

5	105535	AI459519	Hs.297681	serine (or cysteine) protease inhibitor	3.50
	118767	AI038653	Hs.50500	ESTs	3.50
	126634	AW361109	Hs.43627	SRY (sex determining region Y)-box 22	3.50
	130851	R66282	Hs.20247	ESTs, Weakly similar to S65557 alpha-1C-	3.50
	134353	AL138201	Hs.82120	nuclear receptor subfamily 4, group A, m	3.50
	111394	AA412227	Hs.16131	hypothetical protein FLJ12876	3.50
	102696	BE540274	Hs.239	forkhead box M1	3.49
	113037	R17268	Hs.259873	axol transport of synaptic vesicles	3.49
10	111028	H59346	Hs.30151	ESTs, Weakly similar to I38022 hypotheti	3.49
	131688	AI935413	Hs.30592	p21 (CDKN1A)-activated kinase 2	3.49
	115613	AW136951	Hs.173948	hypothetical protein FLJ10486	3.48
	116975	H81076	Hs.269001	ESTs	3.48
	100210	D26381	Hs.3104	KIAA0042 gene product	3.48
15	110147	H18700	Hs.268799	ESTs	3.48
	115600	AA081395	Hs.42173	Homo sapiens cD FLJ10366 fis, clone NT	3.48
	119088	R39261	Hs.90790	Homo sapiens cD: FLJ22830 fis, clone K	3.48
	120347	AA211068	Hs.120247	nuclear fragile X mental retardation pro	3.48
	122702	AI220089	Hs.99439	ESTs	3.48
20	125552	H09701	Hs.278366	ESTs, Weakly similar to I38022 hypotheti	3.48
	126461	AI381659	Hs.267086	ESTs	3.48
	128572	AA933022	Hs.256583	Interleukin enhancer binding factor 3, 9	3.48
	118397	BE139479	Hs.161492	ESTs	3.47
	127999	AW978827	Hs.68851	nucleolar protein family A, member 1 (H/	3.47
25	132066	AI929392	Hs.181195	DJ (Hsp40) homolog, subfamily B, membe	3.47
	105693	BE250951	Hs.181368	U5 snRNP-specific protein (220 kD), orth	3.47
	128874	H06245	Hs.106801	ESTs, Weakly similar to PC4259 ferritin	3.46
	119984	AA230228	Hs.59197	ESTs	3.46
	104000	AI146527	Hs.80475	polymerase (R) II (D directed) polyp	3.46
30	101488	BE547216	Hs.181128	ELK1, member of ETS oncogene family	3.46
	101045	J05614		gb:Human proliferating cell nuclear anti	3.46
	120149	AA227609	Hs.94834	ESTs	3.46
	107025	AA825523	Hs.21255	ESTs, Weakly similar to I38022 hypotheti	3.45
	101716	AF050658	Hs.2563	tachykinin, precursor 1 (substance K, su	3.45
35	102899	AI815559	Hs.75730	sigl recognition particle receptor (d	3.45
	123075	AW293133	Hs.101340	ESTs, Weakly similar to A42442 integrin	3.45
	124695	AA594979	Hs.239307	tyrosyl-tR synthetase	3.45
	127669	N28989	Hs.22891	solute carrier family 7 (cationic amino	3.45
	129793	AW207000	Hs.126857	Homo sapiens cD FLJ22936 fis, clone NT	3.44
40	120095	AA693774	Hs.59601	ESTs	3.44
	110915	BE092285	Hs.29724	hypothetical protein FLJ13187	3.43
	130542	U64675	Hs.179825	RAN binding protein 2-like 1	3.43
	100488	BE273749	Hs.752	FK506-binding protein 1A (12kD)	3.43
	115027	AA743331	Hs.272572	hemoglobin, alpha 2	3.43
45	119298	NM_001241	Hs.155478	cyclin T2	3.43
	126486	AI065133	Hs.152316	hypothetical protein PRO0971	3.43
	130021	M24470	Hs.1435	guanosine monophosphate reductase	3.43
	127166	AW954605	Hs.263396	sema domain, transmembrane domain (TM),	3.42
50	114988	AA251089		gb:z504f05.s1 NCL_CGAP_GCB1 Homo sapiens	3.42
	133817	AW578716	Hs.7644	H1 histone family, member 2	3.41
	133562	M60721	Hs.74870	H2.0 (Drosophila)-like homeo box 1	3.41
	105610	AA280072	Hs.99872	fetal Alzheimer antigen	3.41
	129007	AK001521	Hs.107882	hypothetical protein FLJ10659	3.41
	100662	AI368680	Hs.816	SRY (sex determining region Y)-box 2	3.41
55	120159	R60781	Hs.92927	putative 47 kDa protein	3.41
	134966	AW402389	Hs.920	modulator recognition factor 1	3.41
	100369	D79988	Hs.115778	KIAA0168 gene product	3.41
	104260	AF008192	Hs.194283	putative GR5 protein	3.40
60	100134	AA305746	Hs.49	macrophage scavenger receptor 1	3.40
	116015	AA338848	Hs.50334	testes development-related NYD-SP22	3.40
	119251	T15753	Hs.65250	EST	3.40
	127176	BE387162	Hs.280858	ESTs, Highly similar to A35661 D excis	3.40
	123422	AA598484		gb:z504f05.s1 Gessler Wilms tumor Homo s	3.39
65	123094	AA761073	Hs.146847	TRAF family member-associated NFKB activ	3.39
	105289	AB020638	Hs.103000	KIAA0631 protein	3.39
	111219	N68836	Hs.19247	ESTs, Moderately similar to ALUC_HUMAN I	3.38
	127963	AI299013	Hs.87779	Homo sapiens cD: FLJ23087 fis, clone L	3.38
	109412	BE543313	Hs.209473	hypothetical protein FLJ10520	3.38
	118794	AW517051	Hs.118210	ESTs	3.38
70	112040	R43286		gb:yp17a11.s1 Soares infant brain 1N1B H	3.38
	111180	AI798851	Hs.283108	hemoglobin, gamma G	3.38
	117329	AA524065	Hs.93670	Homo sapiens cD: FLJ22664 fis, clone H	3.38
	104371	AI288598	Hs.194081	ESTs, Weakly similar to I38022 hypotheti	3.38
	109265	AA195285	Hs.85982	ESTs	3.38
75	109557	AW452405	Hs.6427	ESTs	3.38
	120753	AA312551	Hs.230157	ESTs	3.38
	120970	AA398118	Hs.97579	ESTs, Weakly similar to A46010 X-linked	3.38
	127094	F13215	Hs.287849	ESTs, Weakly similar to T22074 hypotheti	3.38
	127746	AI239495	Hs.120189	ESTs	3.38
80	123553	AI494291	Hs.111977	ESTs	3.37
	130652	M31689	Hs.1735	inhibin, beta B (activin AB beta polypep	3.37
	135101	U82275	Hs.94498	leukocyte immunoglobulin-like receptor,	3.37
	121799	AI885670	Hs.124027	SELENOPHOSPHATE SYNTHETASE: Human selen	3.37
	112278	Z41698	Hs.26039	Homo sapiens cD FLJ13937 fis, clone Y7	3.36

5	113401	AA610175	Hs.179847	Homo sapiens cD FLJ12195 fls, clone MA	3.36
	109292	AW975746	Hs.188662	KIAA1702 protein	3.38
	135026	N92165	Hs.93231	ESTs	3.35
	118210	N49233	Hs.46914	ESTs, Weakly similar to A46010 X-linked	3.35
	123476	AA384564	Hs.108829	ESTs	3.35
	111076	N59129	Hs.20851	ESTs	3.35
	111520	AJ985369	Hs.301134	ESTs	3.35
	133383	BE313555	Hs.7252	KIAA1224 protein	3.35
10	103731	AA070545		gb:zm70c03.r1 Stratagene neuroepithelium	3.35
	110828	AK002114	Hs.23495	hypothetical protein FLJ11252	3.35
	112520	R68654	Hs.30814	ESTs	3.35
	115725	AW899053	Hs.76917	F-box only protein 8	3.35
	125867	H13331	Hs.123721	ESTs	3.35
15	127719	AI242163	Hs.22670	chromodomain helicase D binding protein	3.35
	129863	BE379765	Hs.129672	sperm associated antigen 9	3.35
	130816	M51877	Hs.1985	spectrin, alpha, erythrocytic 1 (elipto)	3.35
	130888	AL044315	Hs.173094	Homo sapiens mRNA for KIAA1750 protein,	3.35
	133377	AJ131245	Hs.7239	SEC24 (S. cerevisiae) related gene famil	3.35
20	118986	AF148713	Hs.125830	bladder cancer overexpressed protein	3.35
	101723	U34304		gb:Human nonmuscle myosin heavy chain II	3.34
	134693	N70361	Hs.8854	Human transcription unit PVT gene, exons	3.34
	102856	M26150	Hs.248177	H3 histone family, member L	3.34
	105593	AA279341	Hs.174151	aldehyde oxidase 1	3.34
25	134748	L34059	Hs.89484	cadherin 4, type 1, R-cadherin (reB)	3.34
	109149	AA831179	Hs.40065	hypothetical protein MGC4825	3.33
	115026	AA251972	Hs.188718	ESTs	3.33
	103548	Z14244	Hs.75752	cytochrome c oxidase subunit VIIb	3.33
	111189	N87603	Hs.272130	ESTs, Weakly similar to S65824 reverse t	3.33
30	127078	AI422951	Hs.146162	ESTs	3.33
	124949	AI903210	Hs.336780	tubulin, beta polypeptide	3.33
	111012	AI077389	Hs.269818	ESTs, Weakly similar to Z195_HUMAN ZINC	3.33
	113412	AW628660	Hs.44131	KIAA0974 protein	3.33
	116351	AL133623	Hs.82501	similar to mouse Xrn1 / Dhnm2 protein	3.33
35	121633	AA417011	Hs.88175	EST	3.33
	124591	N69243	Hs.192974	hypothetical protein FLJ12735	3.33
	130225	AB021179	Hs.15299	HMBA-inducible	3.33
	131945	NM_002916	Hs.35120	replication factor C (activator 1) 4 (37)	3.33
40	132581	AK000631	Hs.52256	hypothetical protein FLJ20624	3.33
	105726	NM_012068	Hs.9754	activating transcription factor 5	3.32
	101887	M98132		gb:Human MHC class II HLA-DR-beta-1*0901	3.32
	105004	BE616023	Hs.25298	KIAA1813 protein	3.32
	100288	AL039103	Hs.153834	pumilio (Drosophila) homolog 1	3.32
45	116349	N63786	Hs.94149	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.32
	103352	H09366	Hs.78853	uracil-D glycosylase	3.30
	107436	W27720	Hs.12450	protocadherin 9	3.30
	109062	AA160941		gb:zq40d12.s1 Stratagene hNT neuron (937	3.30
	110379	AI300505	Hs.33130	Homo sapiens cD: FLJ23485 fls, clone L	3.30
	111221	AB037782	Hs.15119	KIAA1361 protein	3.30
50	117903	AA768283	Hs.47111	ESTs	3.30
	123265	AA491209		gb:aa47a08.s1 NCI_CGAP_GCB1 Homo sapiens	3.30
	128226	AI284940	Hs.289082	GM2 ganglioside activator protein	3.30
	111945	R40663	Hs.124944	ESTs	3.30
	126214	AW748336	Hs.168052	KIAA0421 protein	3.30
55	121073	H46199	Hs.112184	DKFZP586J0619 protein	3.30
	102083	T35901	Hs.75117	interleukin enhancer binding factor 2, 4	3.30
	100892	NM_007289	Hs.1298	membrane metallo-endopeptidase (neutral	3.30
	134021	L13720	Hs.78501	growth arrest-specific 8	3.30
	126452	R26867		.gb:zh52e01.s1 Soares placenta Nb2HP Homo	3.29
60	117195	AI798425	Hs.42710	ESTs	3.29
	127663	AK000452	Hs.10340	hypothetical protein FLJ20445	3.29
	113677	Z70200	Hs.248112	KIAA0788 protein	3.28
	132398	AA876616	Hs.16979	ESTs, Weakly similar to A43932 mucin 2 p	3.28
65	109533	AL043979	Hs.259729	KIAA0596 protein	3.28
	102915	X07820	Hs.2258	matrix metalloproteinase 10 (stromelysin	3.28
	104348	H05405	Hs.19221	hypothetical protein DKFZp566G1424	3.28
	113047	AI571940	Hs.7549	ESTs	3.28
	113203	AA743563	Hs.10305	ESTs	3.28
	114503	AL040600	Hs.188083	ESTs	3.28
70	122100	AA431220	Hs.41086	pleckstrin homology domain-containing, f	3.28
	123073	AA485061	Hs.105652	ESTs	3.28
	130253	AI078570	Hs.167473	phosphoglucomutase 5	3.28
	130365	W56119	Hs.155103	eukaryotic translation initiation factor	3.28
	130762	D84371	Hs.1898	paraoxase 1	3.28
75	132360	AW893660	Hs.46440	solute carrier family 21 (organic anion	3.28
	110763	AI928445	Hs.92254	syptolagmin-like 2	3.27
	103437	AV555598	Hs.184211	peptidase (mitochondrial processing) bet	3.27
	114840	AA447591	Hs.87359	ESTs, Highly similar to RB18_HUMAN RAS-R	3.27
	106888	AA020564	Hs.24734	oxysterol binding protein	3.27
80	129696	BE295568	Hs.13225	UDP-Gal:betaGlc beta 1,4- galactosyl	3.26
	113459	T80208	Hs.14716	ESTs	3.26
	134332	D86962	Hs.81875	growth factor receptor-bound protein 10	3.26
	117048	H89732	Hs.230113	EST	3.26
	109249	AA194730	Hs.268189	hypothetical protein FLJ20438	3.26

5	134663	W73428	Hs.8750	uncharacterized bone marrow protein BM04	3.26
	114440	AL046511	Hs.106525	hypothetical protein FLJ12587	3.25
	102196	BE266830	Hs.75238	chromatin assembly factor 1, subunit B (	3.25
	109581	R45584	Hs.23025	ESTs, Weakly similar to ALU5_HUMAN ALU S	3.25
	120814	AW887798	Hs.96880	ESTs, Weakly similar to I38022 hypothetical	3.25
	122391	AA446316	Hs.191622	ESTs	3.25
	122553	AA451884	Hs.190121	ESTs	3.25
	124755	R38087	Hs.267690	KIAA1228 protein	3.25
10	130943	U20760	Hs.272429	calcium-sensing receptor (hypocalcemic	3.25
	115185	BE299677	Hs.105461	hypothetical protein FLJ20357	3.25
	114297	AA149707	Hs.173091	ubiquitin-like 3	3.25
	106657	AW854339	Hs.33476	hypothetical protein FLJ11937	3.25
	124320	H95749	Hs.102342	EST	3.25
15	124087	H08773	Hs.288590	Homo sapiens cD FLJ11454 fis, clone HE	3.24
	110705	AB007902	Hs.32168	KIAA0442 protein	3.24
	106508	AI205785	Hs.30348	ESTs	3.24
	112538	AA908813		gbr:og77h06.s1 NCI_CGAP_Ov8 Homo sapiens	3.24
	100130	NM_000304	Hs.103724	peripheral myelin protein 22	3.24
20	106017	AA477956	Hs.26268	ESTs	3.24
	113921	AW976530	Hs.28355	hypothetical protein FLJ22402	3.23
	121520	AA412163	Hs.164785	ESTs	3.23
	129255	AI961727	Hs.109604	H1 histone family, member X	3.23
	125069	H81306	Hs.194485	ESTs	3.23
25	118863	AA081218	Hs.58608	Homo sapiens cD FLJ14205 fis, clone NT	3.23
	111273	N70934		gbr:ca33f08.s1 Soares fetal liver spleen	3.23
	102971	X16609	Hs.183805	ankyrin 1, erythrocytic	3.23
	103937	AA934083	Hs.13836	ESTs, Weakly similar to I38022 hypothet	3.23
	121770	NM_016902	Hs.278428	progesterone induced protein	3.23
30	128972	AA528140	Hs.107515	ESTs, Weakly similar to T00329 hypothet	3.23
	132528	T78738	Hs.50758	SMC4 (structural maintenance of chromoso	3.23
	134835	L04569	Hs.89925	calcium channel, voltage-dependent, L ty	3.23
	103158	BE242587	Hs.118651	hematopoietically expressed homeobox	3.22
	118405	AL117518	Hs.3686	KIAA0978 protein	3.22
35	104631	AA002064	Hs.18920	ESTs	3.22
	114253	BE149866	Hs.14831	Homo sapiens, Similar to zinc finger pro	3.22
	134607	AI675881	Hs.86538	ESTs	3.22
	135114	AW340493	Hs.175043	ancient conserved domain protein 4	3.22
	120191	BE407106	Hs.65907	Homo sapiens, clone IMAGE:3959816, mR,	3.22
40	105029	AI122691	Hs.13268	ESTs	3.21
	128550	AA418276	Hs.170142	ESTs	3.21
	119873	AI660149	Hs.44865	lysosomal	3.21
	130115	T47294	Hs.149923	X-box binding protein 1	3.21
45	133916	AL039185	Hs.77558	thyroid hormone receptor interactor 7	3.21
	120259	AW014788	Hs.192742	hypothetical protein FLJ12785	3.21
	110721	H97878	Hs.31319	ESTs	3.21
	130052	AL049415	Hs.278679	a disintegrin and metalloprotease doma	3.21
	100255	D38521	Hs.112398	KIAA0077 protein	3.20
	100624	AB001025	Hs.9349	ryanodine receptor 3	3.20
50	122275	AA437124	Hs.187247	ESTs	3.20
	127099	AA347668		gbr:EST54026 Fetal heart II Homo sapiens	3.20
	134321	BE538082	Hs.8172	ESTs, Moderately similar to A46010 X-link	3.20
	132809	AF036144	Hs.5734	meningioma expressed antigen 5 (hyaluron	3.20
	101125	AJ250562	Hs.82749	transmembrane 4 superfamily member 2	3.20
55	128339	AL121087	Hs.296406	KIAA0685 gene product	3.19
	117121	H95044	Hs.321388	EST	3.19
	124760	AW408588	Hs.91052	ESTs, Moderately similar to ALU5_HUMAN A	3.19
	132232	AI522273	Hs.42640	ESTs	3.19
	125919	W26713	Hs.256972	ESTs	3.19
60	123324	AB018352	Hs.105399	KIAA0809 protein	3.19
	100157	D14861	Hs.119	Wilms' tumour 1-associated protein	3.19
	101447	M21305		gbr:Human alpha satellite and satellite 3	3.19
	124345	NM_014487	Hs.120768	nucleolar cysteine-rich protein	3.18
65	122583	NM_012447	Hs.20132	stromal antigen 3	3.18
	128961	AL133014	Hs.107387	CGI-20 protein	3.18
	111321	AI559766	Hs.13205	ESTs	3.18
	134977	AL044983	Hs.306121	leukocyte receptor cluster (LRC) encoded	3.18
	131535	N22120	Hs.75277	hypothetical protein FLJ13910	3.18
70	109950	H08200	Hs.268770	ESTs, Weakly similar to 2004399A chromos	3.18
	129875	AA181018	Hs.13058	hypothetical protein FLJ13920	3.18
	101654	M60298	Hs.733	erythrocyte membrane protein band 4.2	3.18
	104732	AL079294	Hs.28952	Homo sapiens mR full length insert cDN	3.18
	106887	AB037744	Hs.34892	KIAA1323 protein	3.18
	108301	AA069728	Hs.184582	ribosomal protein L24	3.18
75	118042	AI432389	Hs.161465	ESTs	3.18
	120900	AA830712	Hs.291931	ESTs	3.18
	129312	T97579	Hs.110334	ESTs, Weakly similar to I78885 serine/th	3.18
	116291	AW410377	Hs.41502	hypothetical protein FLJ21276	3.17
	110672	AW612890	Hs.191178	ESTs	3.17
80	115665	BE072425	Hs.44579	hypothetical protein FLJ20199	3.17
	127581	AK000680	Hs.266175	phosphoprotein associated with GEMs	3.17
	129584	AV656017	Hs.184325	CGI-76 protein	3.16
	108830	AA131743	Hs.193352	ESTs	3.16
	124443	AB57519	Hs.302031	zinc finger protein, subfamily 1A, 4 (Eo	3.16

5	106290	AW961393	Hs.16364	hypothetical protein FLJ10955	3.16
	122787	AI203093	Hs.99512	ESTs	3.16
	133112	T15465	Hs.182231	thyrotropin-releasing hormone	3.16
	118435	AA185761	Hs.334812	hypothetical protein DKFZp586K0717	3.16
	109121	BE389387	Hs.49767	DH dehydrogase (ubiquinone) Fe-S pro	3.16
	126721	AW579621	Hs.125359	Thy-1 cell surface antigen	3.15
	102526	AA203429	Hs.79474	tyrosine 3-monooxygenase/tryptophan 5-mo	3.15
	100512	D13317	Hs.78915	GA-binding protein transcription factor,	3.15
10	105299	AF098951	Hs.194720	ATP-binding cassette, sub-family G (WHIT	3.15
	117842	AI884505	Hs.161121	ESTs	3.15
	123049	BE047680	Hs.211869	clckkopl (Xenopus laevis) homolog 2	3.15
	128639	AW582952	Hs.102897	CGI-47 protein	3.15
	130343	AB040914	Hs.278628	KIAA1481 protein	3.15
15	115706	AB004849	Hs.50748	chromosome 21 open reading frame 18	3.15
	120673	AW586534	Hs.105093	ESTs	3.15
	132116	AW560474	Hs.40289	ESTs	3.15
	116217	AU078474	Hs.123178	translocase of inner mitochondrial membr	3.15
	104926	BE288808	Hs.33363	DKFZP434N093 protein	3.14
20	105297	NM_015905	Hs.183858	transcriptional intermediary factor 1	3.14
	125343	AI475495	Hs.304101	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.14
	116618	H11695	Hs.322901	disrupter of silencing 10	3.14
	124893	AA830185	Hs.269680	ESTs	3.13
	105481	BE539071	Hs.69388	hypothetical protein FLJ20505	3.13
25	126165	AI741816	Hs.125897	ESTs	3.13
	105212	AA205334	Hs.324278	Homo sapiens mR; cD DKFZp566M063 (fr	3.13
	101628	M57506	Hs.72918	small inducible cytokine A1 (I-309, homo	3.13
	107951	AI300077	Hs.61690	ESTs	3.13
	109168	AA218691	Hs.73625	RAB8 interacting, kinesin-like (rabkines	3.13
30	117299	N75768		gbv30b07.r1 Morton Fetal Cochlea Homo	3.13
	119694	AA041350	Hs.57847	ESTs, Moderately similar to ICE4_HUMAN C	3.13
	124840	R56146	Hs.164515	EST, Weakly similar to AF090930 1 PRO047	3.13
	127433	AW979155	Hs.298275	amino acid transporter 2	3.13
	128337	AI123529	Hs.166592	ESTs	3.13
35	134053	AW628686	Hs.78851	KIAA0217 protein	3.13
	134475	NM_014733	Hs.83790	KIAA0305 gene product	3.13
	128761	BE300341	Hs.104925	ectodermal-neural cortex (with BTB-like	3.12
	124971	T23800	Hs.161001	hypothetical protein FLJ14728	3.12
	128314	T87479	Hs.291787	ESTs	3.12
40	134695	AB036829	Hs.178347	SKIP for skeletal muscle and kidney enri	3.12
	131333	BE244603	Hs.25726	transposon-derived Buster1 transposase-1	3.12
	119781	AJ278018	Hs.55565	ankyrin repeat domain 3	3.12
	131824	U28838	Hs.32935	TATA box binding protein (TBP)-associate	3.11
	124595	AW194851	Hs.111801	arsenite resistance protein ARS2	3.11
45	116115	AL042355	Hs.70202	WD repeat domain 10	3.11
	129415	AI807084	Hs.111243	MADS box transcription enhancer factor 2	3.11
	111552	T97939	Hs.191185	ESTs	3.10
	134881	NM_000937	Hs.171880	polymerase (R) II (D directed) polyp	3.10
	104971	BE311926	Hs.15830	hypothetical protein FLJ12691	3.10
50	126536	AA156151		gbz048c06.r1 Stratagene endothelial cel	3.10
	128246	AI906112	Hs.214818	DMRT-like family C2	3.10
	106412	AA453734	Hs.10198	ESTs	3.10
	107902	AA026827	Hs.81358	ESTs	3.10
	112495	AI346487	Hs.28739	ESTs	3.09
55	131870	NM_014874	Hs.3363	KIAA0214 gene product	3.09
	105301	AW352357	Hs.7457	MAGE1 protein	3.09
	123670	AI189844	Hs.112708	ESTs, Moderately similar to ZN91_HUMAN Z	3.09
	116474	AW160774	Hs.159154	tubulin, beta, 4	3.09
	112084	AL049390	Hs.22689	Homo sapiens mR; cD DKFZp586O1318 (f	3.09
60	130525	AA381850	Hs.322149	Human clone 137308 mR, partial cds	3.08
	120398	AL133849	Hs.110953	retinoic acid induced 1	3.08
	102735	AF111106	Hs.3382	protein phosphatase 4, regulatory subun	3.08
	124748	R34617		gbv85h12.a1 Soares placenta Nb2HP Homo	3.08
	120755	AA312934	Hs.190745	Homo sapiens cD: FLJ21326 fs, clone C	3.08
65	118895	BE304917	Hs.31097	hypothetical protein FLJ21478	3.08
	107463	AW952022	Hs.315164	hypothetical protein similar to actin re	3.08
	114290	R51383	Hs.25793	ESTs	3.08
	119005	AL038511	Hs.125318	ESTs, Weakly similar to S33990 finger pr	3.08
	125876	BE612918	Hs.151973	hypothetical protein FLJ23511	3.08
70	127766	AA723659	Hs.290607	EST	3.08
	132693	BE244200	Hs.55075	KIAA0410 gene product	3.07
	106812	BE251590	Hs.239370	DKFZP7271051 protein	3.07
	125654	X96753	Hs.9004	chondroitin sulfate proteoglycan 4 (mela	3.07
	111836	R58394	Hs.25119	ESTs, Weakly similar to YEX0_YEAST HYPOT	3.06
75	101682	AF043045	Hs.81008	filantin B, beta (actin-binding protein-2	3.06
	110004	H10413	Hs.268774	ESTs	3.06
	117591	N64777	Hs.44656	ESTs	3.06
	110737	AA335609	Hs.7589	ESTs, Weakly similar to A46010 X-linked	3.06
	134337	NM_004922	Hs.81964	SEC24 (S. cerevisiae) related gene famil	3.06
	132450	AA100012	Hs.48827	hypothetical protein FLJ12085	3.06
80	125556	AB033064	Hs.334806	KIAA1238 protein	3.06
	101811	NM_002556	Hs.24734	oxysterol binding protein	3.06
	131530	AA574309	Hs.283402	TCR eta	3.06
	105049	AB032945	Hs.172506	myosin VB	3.06



5	126514	AA701941	Hs.187555	ESTs	3.05
	130960	AF035621	Hs.21611	kinesin family member 3C	3.05
	105503	AW963624	Hs.31707	ESTs, Weakly similar to YEW4_YEAST HYPOT	3.05
	107361	U72513	Hs.159486	Human RPL13-2 pseudogene mR, complete	3.05
	107575	D81886	Hs.59908	ESTs	3.05
	116999	H84644	Hs.40707	EST	3.05
	118554	W38188		(NONE)	3.05
	120934	AA226198		gb:nc26a07.s1 NCI_CGAP_Prl Homo sapiens	3.05
10	125805	A160594	Hs.186656	ESTs, Highly similar to S49460 glutamate	3.05
	127263	AA331166		gb:EST35034 Embryo, 6 week, subtracted (	3.05
	128025	T64877	Hs.108479	ESTs	3.05
	131090	A1143139	Hs.2288	visinin-like 1	3.05
	112197	NM_003655	Hs.5637	ESTs	3.05
15	133492	L40397	Hs.74137	transmembrane trafficking protein	3.05
	118485	AA508515	Hs.291049	ESTs	3.04
	113893	A1373741	Hs.59384	hypothetical protein MGC3047	3.04
	116911	AW205577	Hs.308435	ESTs, Moderately similar to KIAA0745 pro	3.04
	132833	U78525	Hs.57783	eukaryotic translation initiation factor	3.04
20	124724	H20816	Hs.112423	Homo sapiens mR; cD DKFZp586I1420 (f	3.04
	105894	A1904740	Hs.25691	receptor (calcitonin) activity modifying	3.04
	129991	R28386	Hs.179925	ESTs, Weakly similar to ALU8_HUMAN ALU S	3.04
	128714	T85231	Hs.179661	tubulin, beta 5	3.04
	134650	U76378	Hs.87247	harakiri, BCL2-interacting protein (cont	3.04
25	106851	AI458623		gb:U04g09.s1 NCI_CGAP_Lu24 Homo sapiens	3.04
	133445	AC005262	Hs.73797	guanine nucleotide binding protein (G pr	3.04
	102581	AU077228	Hs.77258	enhancer of zeste (Drosophila) homolog 2	3.04
	127542	AA703684	Hs.245474	ESTs, Moderately similar to ALUS_HUMAN A	3.03
	113043	A1828789	Hs.7483	ESTs	3.03
30	134710	AI433797	Hs.8889	serine hydroxymethyltransferase 1 (solub	3.03
	119245	A1815733	Hs.114360	transforming growth factor beta-stimulat	3.03
	106391	AW959538	Hs.321214	hypothetical protein DKFZp564D0478	3.03
	114607	AF041260	Hs.129057	breast carcinoma amplified sequence 1	3.03
	116083	AA455706	Hs.44581	heat shock protein hsp70-related protein	3.03
35	132079	A1701457	Hs.38694	ESTs	3.03
	103825	A1571835	Hs.55468	ESTs	3.03
	108438	A1141031	Hs.21342	ESTs	3.03
	124359	N22508	Hs.139315	Homo sapiens cD: FLJ21479 fs, clone C	3.03
	126384	AW090188	Hs.4779	KIAA1150 protein	3.03
40	127995	AA970953	Hs.128709	ESTs	3.03
	127981	AA837029	Hs.157483	ESTs	3.02
	124417	N34059		gb:yv28h09.s1 Soares fetal liver spleen	3.02
	124357	N22401		gb:yw37g07.s1 Morton Fetal Cochlea Homo	3.02
	105437	AF151078	Hs.25199	hypothetical protein	3.02
45	101158	AW327723	Hs.78122	splicing factor, arginine/serine-rich 4	3.02
	113897	R91601	Hs.4947	hypothetical protein FLJ22584	3.02
	100159	AA285268	Hs.23488	KIAA0107 gene product	3.02
	108487	A1897340	Hs.135265	Homo sapiens clone FLB8436 PRO2277 mR,	3.02
	124977	F04819	Hs.190452	KIAA0365 gene product	3.02
50	131631	AA022569	Hs.29802	slit (Drosophila) homolog 2	3.01
	102259	AL041219	Hs.82222	sema domain, immunoglobulin domain (Ig),	3.01
	104399	AL022316	Hs.301947	kraken-like	3.01
	116536	BE218027	Hs.89969	ESTs	3.00
	125889	AA351978	Hs.4943	hepatocellular carcinoma associated prot	3.00
55	102233	AW163045	Hs.78334	nuclear factor, interleukin 3 regulated	3.00
	102628	U90322	Hs.27812	G protein-coupled receptor 23	3.00
	112812	H55977	Hs.35810	ESTs	3.00
	114654	AA101840	Hs.103679	ESTs	3.00
	118555	N88372		gb:za58c10.s1 Soares_fetal_lung_NbHL19W	3.00
60	120005	W90105	Hs.94942	EST	3.00
	123596	AA421130	Hs.112640	EST	3.00
	126134	AL133033	Hs.4084	KIAA1025 protein	3.00
	126194	H98755	Hs.302975	ESTs, Weakly similar to Z195_HUMAN ZINC	3.00
	129778	AK001676	Hs.12457	hypothetical protein FLJ10814	3.00
65	Table 3B: Pkey: Unique Eos probeset identifier number CAT number: Gene cluster number Accession: Genbank accession numbers				
70	Pkey	CAT number	Accession		
	123619	371681_1	AA602664 AA609200		
	124417	1642364_1	N34059 N46979		
	117299	1632586_1	N75768 N22543		
75	116845	393481_1	AA649530 AA659316 H64973		
	124748	1715080_1	R34617		
	125596	1708455_1	R25698 R56582 R56018		
	126257	182217_1	N99638 AW973750 AA328271 H90994 AA558020 AA234435 N59599 R94815		
	126280	1572221_1	Z19417 H20868		
80	126319	1528523_1	D81889 D81802		
	104172	273499_1	AA476418 AA393338 AA398747 AA476518		
	126426	110697_1	AA125984 AA127189 AA065075 AA070377 AA100017 AA078891 AA113255 AA075168 AA082764 AA083380 N84829 AA084752		
			AA076512 AA085119 AA085208 AA085045		
	126433	127143_1	AA325608 AA099517 N89423		

	127092	177898_1	T26985 Z44165
	127099	244301_1	AA347668 AW956810 Z44271 F07065 F07064 R13508
	126535	149206_1	AA158151 Z25109 C05177
5	103731	112052_1	AA070545 AA131490 AA131373
	127283	232181_1	AA331158 AA331157 AA331155
	126783	113388_1	AA083531 AA126047 AA074915 AA148849
	118946	1683457_1	N92834 W25061
	127520	656170_1	T51239
10	127532	353907_1	AJ003429 AJ003367 AA564825
	112516	1744223_1	T83909 R68586
	112538	504579_1	AA908813 R70255
	112540	1605263_1	R69751 R70467 H69771 H80879 H80878
	113248	328626_1	T63857 AW971220 AA493469 T63699
15	112631	1745257_1	R82040 R70934
	126360	1540098_1	F12374 T74059
	120514	25532_3	AA258335 AA258499
	127887	1511945_1	C18530 T63953
	120637	200885_1	AA811804 AA809404 AA286907 AW977624
20	121481	123001_1	AA411931 AA411930
	120934	177521_1	AA226198 AA226513 AA383773
	106566	120358_1	BE298210 AI672315 AW086489 BE298417 AA455921 AA902537 BE327124 R14963 AA085210 AW274273 AI333584 AI369742
			AI039658 AI885095 AI476470 AI287650 AI885299 AI985381 AW592624 AW340136 AI266556 AA456390 AI310815 AA484951
25	121743	274582_1	AA397636 AA421144
	114699	135322_1	AA127386 R15644 AA127404
	106851	322947_1	AI458623 AA639708 AA485409 R22065 AA485570
	123731	genbank_AA609839	AA609839
	123973	506369_1	C14805
	116793	74964_1	T77781 AW014157 D12422 AI918246 AA452599 AA628404 N35886 AA464593 AW301738 T77780 AI042309 AI095302 H06063
30			AW510576 H37814 W81360 AI373286 AI702287 AA152465 AW169087 AW169012 AW340355 AI289311
	109700	genbank_F09809	F09809
	116466	genbank_N68741	N68741
	111273	genbank_N70934	N70934
	118555	genbank_N68372	N68372
35	111462	genbank_R05296	R05296
	118720	genbank_N73515	N73515
	118737	382979_1	AA199686 N73861
	111826	genbank_R35975	R35975
	120376	genbank_AA227469	AA227469
40	120809	genbank_AA346495	AA346495
	120839	genbank_AA348913	AA348913
	120873	genbank_AA358015	AA358015
	115498	genbank_AA291070	AA291070
	101045	entrez_J05614	J05614
45	129969	genbank_N57818	N57818
	108407	genbank_AA075519	AA075519
	122939	genbank_AA477141	AA477141
	117031	genbank_H88353	H88353
	124298	genbank_H91679	H91679
50	117099	321871_1	H83699 H97976 H80036
	101447	entrez_M21305	M21305
	124357	genbank_N22401	N22401
	101723	2603_1	U34304 AA355800 M59181 AA375523 AA093590 AA365595 S87247 AI371781 AW351920 AW181991 H28934 W79172 AA653543
55			AA122005 W95572 AF088505 C02448 W57668 T11988 W95465 AA425179 F05724 F12205 F08285 R16384 T66222 F08515
			F07288 AA150346 H83264 T86770 N38366 AA337253 H12001 H82899 H69395 H69380 N29054 N30920 T97385 T96819
			AA463807 AL079860 T11987 AA305048 AA149133 T82813 AA029555 AA035109 AA449123 AA340287 AA724155 W05196
			AI859528 AA149134 C16426 C16097 C16587 C16138 C16107 AW021754 C16500 N30019 R55718 R60552 N84522 AI143322
			AW518024 AA490700 N20675 AW288747 C16068 D58331 C16518 AI141214 N57221 C16423 C16537 C16094 C16152 H28935
			T66152 C16362 AW022425 AA602899 AA694603 H22255 W74368 C16356 AI129361 AI917988 AI582253 AI923898 AI038907
60			AW191970 AI678861 C16429 C16345 AI277790 R42325 AI640420 AI004136 AI277797 C16100 F09836 T71212 AA152318
			AW090781 AI065902 T16084 AW022915 C16556 AW473979 T96820 AA476595 N75446 F02570 H69286 T89992 AA907493
			T34275 AA156107 H11758 AI650288 H82900 AI474575 N66718 F04914 AA505470 AA993349 F01973 AI123277 F04729 C16236
			AA879148 AA029574 AA887046 R08127 D57339 AA490477 AI669818 AI180936 AA035507 AI119272 AL135029 AA258725
			AL079521 N40299 AI830191 N86148 AA341165 T28492 N83749 AI382123 AI065033 AI950411 AI935653 AI275551 AW027482
65			AW197337 AI158323 AI336930 AI094099 AI351490 AA258563 AI634763 AA492374 AA983970 AI123565 T72559 F09890
			AA669531 AI445824 T07180 AW084799 AA306254 R60606 W28367 R55928 W27995 AL044845 AA501890 N84045 T97274
			N87532 AL135219 AA116056 T06000 AA116057 T07181 R08126
	124677	genbank_R01073	R01073
	110243	genbank_H26683	H26683
70	101867	entrez_M96132	M96132
	101941	entrez_S77583	S77583
	119052	149538_1	R10889 R10888
	126452	209811_1	R26867 R27438
	119263	genbank_T15977	T15977
75	112040	genbank_R43286	R43286
	103657	entrez_Z73677	Z73677
	119400	genbank_T92767	T92767
	119554	NOT_FOUND_entrez_W38188	W38188
	123130	genbank_AA487200	AA487200
80	123143	genbank_AA487595	AA487595
	121950	genbank_AA429515	AA429515
	123285	genbank_AA491209	AA491209
	114988	genbank_AA251089	AA251089
	107794	genbank_AA019255	AA019255

123422 genbank\_AA598484 AA598484  
109062 genbank\_AA160941 AA160941

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TABLE 4A: ABOUT 1164 GENES UPREGULATED IN GLIOBLASTOMA

Pkey:	Unique Eos probeset identifier number				
ExAccn:	Exemplar Accession number, Genbank accession number				
UnigeneID:	Unigene number				
Unigene Title:	Unigene gene title				
R1:	Ratio of brain tumor to body atlas				
R2:	Ratio of brain tumor to normal brain				
Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
412719	AW016610	Hs.129911	ESTs	117.8	3.3
428321	AJ699994	Hs.301347	ESTs	108.9	3.9
455601	AI368680	Hs.816	SRY (sex determining region Y)-box 2	107.5	9.9
431917	D18181	Hs.2858	peripheral myelin protein 2	99.0	11.8
415817	U89967	Hs.78867	protein tyrosine phosphatase, receptor-t	72.0	11.3
449494	AW237014	Hs.288550	aquaporin 4	60.0	2.2
439285	AL133916	Hs.298998	ESTs	58.2	2.2
447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	54.2	7.1
456759	BE259150	Hs.127792	delta (Drosophila)-like 3	53.5	2.5
427343	AJ880044	Hs.176977	protein kinase C binding protein 2	49.6	2.2
425088	AA663372	Hs.169395	Homo sapiens cDNA FLJ12015 fs, clone HE	49.5	3.1
412959	D87458	Hs.76090	KIAA0282 protein	46.3	3.0
447004	AW296968	Hs.157539	ESTs	43.7	3.2
436878	BE465204	Hs.47448	ESTs	39.8	10.8
433551	AJ985544	Hs.289048	ESTs	39.7	4.3
425842	AJ587490	Hs.159823	NK-2 (Drosophila) homolog B	39.3	26.2
407034	U84540		gb:Human dystrobrein isoform DTN-3 (DTN	39.1	39.1
431725	X65724	Hs.2839	Norio disease (pseudoglioma)	38.4	3.7
453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	37.5	22.1
447197	R36075		gb:yh88b01.s1 Soares placenta Nb2HP Homo	37.5	13.9
439415	F05538	Hs.12825	ESTs	35.4	3.1
409395	U46745	Hs.54435	dystrobrein, alpha	34.3	3.0
449539	W80363	Hs.58446	ESTs	33.6	33.6
408582	AJ436323	Hs.31141	Homo sapiens mRNA for KIAA1568 protein,	32.8	5.9
431019	NM_005249	Hs.2714	forkhead box G1B	32.4	17.0
427540	R12014	Hs.20976	ESTs	32.1	2.0
425057	AA826434	Hs.96944	ESTs	31.0	2.3
431941	AK000105	Hs.272227	Homo sapiens cDNA FLJ20099 fs, clone CO	30.8	30.8
416829	AB013805	Hs.80220	catenin (cadherin-associated protein), d	30.4	2.2
420807	AA280627	Hs.57846	ESTs	30.4	30.4
444190	AJ878918	Hs.10526	cysteine and glycine-rich protein 2	30.4	30.4
429466	M85835	Hs.12827	ESTs	30.2	7.2
444471	AB020684	Hs.11217	KIAA0877 protein	29.5	29.5
451678	AA374181	Hs.26799	DKFZP584D0764 protein	28.8	3.0
439979	AW600291	Hs.6823	hypothetical protein FLJ10430	27.7	3.2
433800	AJ034361	Hs.135150	lung type-I cell membrane-associated gly	27.1	27.1
440435	AL042201	Hs.21273	ESTs	26.9	26.9
411078	AJ222020	Hs.182384	ESTs, Weakly similar to 25 kDa trypsin i	26.0	26.0
407808	AA663559	Hs.289109	dimethylarginine dimethylaminohydrolase	25.8	2.2
416155	AJ807264	Hs.205442	ESTs, Weakly similar to AF117610 1 inner	25.5	25.5
421659	NM_014459	Hs.106511	protocadherin 17	25.0	3.3
430132	AA204686	Hs.234149	hypothetical protein FLJ20647	24.7	24.7
433332	AJ367347	Hs.127809	ESTs	24.6	24.6
452744	AJ287852	Hs.30504	Homo sapiens mRNA; cDNA DKFZp434E082 (tr	23.8	23.8
419271	N34901	Hs.238532	ESTs	23.6	6.5
447397	BE247676	Hs.18442	E-1 enzyme	23.1	3.2
439039	AJ656707	Hs.48713	ESTs	23.0	7.2
414175	AJ308876	Hs.103849	ESTs	22.2	2.0
451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	22.0	7.6
410102	AW248508	Hs.279727	Homo sapiens cDNA FLJ14035 fs, clone HE	21.6	2.3
416910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	21.2	3.0
451468	AW503398	Hs.210047	ESTs	21.0	4.7
454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	20.8	20.8
443850	AW014723	Hs.134719	ESTs	20.4	38.5
418738	AW388633	Hs.6682	ESTs	20.2	2.2
449433	AJ672096	Hs.9012	ESTs	19.9	16.6
435706	W31254	Hs.7045	GLD04 protein	19.7	19.7
407192	AA609200		gb:af12e02.s1 Soares_testis_NHT Homo sap	19.7	19.7
416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	19.6	19.6
442562	BE379584	Hs.34789	ESTs	19.4	19.4
439451	AF086270	Hs.278554	heterochromatin-like protein 1	19.1	17.4
426320	W47595	Hs.169300	transforming growth factor, beta 2	18.7	5.4
412958	X81120	Hs.75110	cannabinoid receptor 1 (brain)	18.6	18.6
452106	AJ141031	Hs.21342	ESTs	18.6	10.3
431173	AW971198	Hs.294068	ESTs	18.6	18.6
422583	AA410506	Hs.118578	H.sapiens mRNA for ribosomal protein L18	18.5	18.5
418088	AI538323	Hs.77496	small nuclear ribonucleoprotein polypept	18.5	18.5
443547	AW271273	Hs.23767	Homo sapiens cDNA FLJ12666 fs, clone NT	18.5	5.1
451592	AI805418	Hs.213897	ESTs	18.4	18.4
450313	AI038989	Hs.24809	hypothetical protein FLJ10826	18.3	18.3

5	422544	AB016259	Hs.118140	KIAA0716 gene product	18.2	4.7
	408096	BE250162	Hs.83765	dihydrofolate reductase	18.0	18.0
	418027	AB037607	Hs.83293	hypothetical protein	18.0	8.2
	414117	W88559	Hs.1787	proteolipid protein (Pelizaeus-Merzbacher)	18.0	18.0
	429418	AI381028	Hs.99283	ESTs	17.8	17.8
	432527	AW975028	Hs.102754	ESTs	17.7	4.2
	447809	AW207605	Hs.164230	ESTs, Highly similar to phosphodiesterase	17.5	4.3
	419704	AA429104	Hs.45057	ESTs	17.4	4.6
	436476	AA326108	Hs.53631	ESTs, Weakly similar to enhancer-of-split	17.4	2.1
10	445133	AW157648	Hs.153508	ESTs, Weakly similar to AF150755 1 micro	17.3	18.8
	446859	AI335361	Hs.226376	ESTs	17.2	2.8
	409049	AI23132	Hs.146343	ESTs	17.2	3.8
	443672	AA323362	Hs.9657	butyrobetaine (gamma), 2-oxoglutarate di	17.2	11.0
	407748	AL079409	Hs.38176	KIAA0606 protein; SCN Circadian Oscillat	17.0	6.3
15	438527	AI969251	Hs.143237	ESTs	16.9	16.9
	417791	AW965339	Hs.111471	ESTs	16.8	10.5
	417355	D13168	Hs.82002	endothelin receptor type B	16.4	18.4
	427897	NM_017413	Hs.181080	apelin; peptide ligand for APJ receptor	16.3	4.2
	419721	NM_001650	Hs.288650	aquaporin 4	16.2	4.4
20	427701	AA411101	Hs.221750	ESTs	16.1	3.9
	432435	BE218888	Hs.282070	ESTs	16.1	5.7
	426809	BE313114	Hs.29708	ESTs	16.0	10.0
	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfot	15.9	15.9
25	400859				15.7	15.7
	409731	AA125885	Hs.56145	thymosin, beta, identified in neuroblast	15.6	15.6
	420092	AA814043	Hs.88045	ESTs	15.6	5.4
	449605	AW138581	Hs.198416	ESTs	15.5	3.0
	422385	AF035637	Hs.115521	REV3 (yeast homolog)-like, catalytic sub	15.3	4.6
30	449611	AI970394	Hs.197075	ESTs	15.2	15.2
	414922	D00723	Hs.77631	glycine cleavage system protein H (amino	15.2	5.6
	405238				15.1	2.8
	429007	D80642		gb:HUM092E09B Human fetal brain (TFujiwa	15.0	3.5
	409638	AW450420	Hs.21335	ESTs	14.9	7.1
35	445888	AF070564	Hs.13415	Homo sapiens clone 24571 mRNA sequence	14.8	5.7
	416737	AF154335	Hs.79691	LIM domain protein	14.7	4.2
	429163	AA884768		gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s	14.6	3.0
	436870	AW204219	Hs.43879	ESTs	14.6	2.6
	443181	AI039201	Hs.54548	ESTs	14.6	3.5
40	436281	AW411194	Hs.120051	ESTs	14.5	8.5
	449448	D60730	Hs.57471	ESTs	14.4	4.8
	422564	AI148006	Hs.222120	ESTs	14.4	14.4
	448243	AW368771	Hs.77496	small nuclear ribonucleoprotein polypept	14.3	2.4
	428748	AW593206	Hs.98785	ESTs	14.2	14.2
45	452578	AB023177	Hs.29900	KIAA0980 protein	14.1	8.1
	452461	N78223	Hs.108106	transcription factor	14.1	12.8
	449670	F07693	Hs.23869	Homo sapiens mRNA; cDNA DKFZp434K2172 (I	14.1	14.1
	436637	AI783629	Hs.28768	ESTs	14.0	2.3
50	429597	NM_003816	Hs.2442	a disintegrin and metalloproteinase doma	13.9	13.9
	419078	M33119	Hs.89584	Insulinoma-associated 1	13.9	2.9
	410889	X91662	Hs.68744	twist (Drosophila) homolog (acrocephalos	13.9	4.1
	452355	N54926	Hs.29202	G protein-coupled receptor 34	13.9	13.9
	421452	AI925946	Hs.104530	fetal hypothetical protein	13.9	13.9
	430290	AI734110	Hs.136355	ESTs	13.8	13.8
55	430387	AW372884	Hs.240770	nuclear cap binding protein subunit 2, 2	13.6	13.6
	415875	AA894876	Hs.5687	protein phosphatase 1B (formerly 2C), ma	13.5	13.5
	416795	AI497778	Hs.168053	ESTs, Highly similar to AF227948 1 HBV p	13.5	13.5
	422025	BE348774	Hs.122554	ESTs	13.3	13.3
	400992				13.3	5.5
60	413174	AA723564	Hs.191343	ESTs	13.2	2.6
	425187	AW014486	Hs.22509	ESTs	13.1	8.2
	456965	AW131888	Hs.172792	ESTs, Weakly similar to hypothetical pro	13.1	2.7
	419852	AW503758	Hs.286184	hypothetical protein dJ551D2.5	13.0	2.4
	409327	L41182	Hs.53563	collagen, type IX, alpha 3	12.9	4.0
65	439619	AA837118	Hs.118366	ESTs	12.9	7.6
	436289	AK000767	Hs.5111	hypothetical protein FLJ20729	12.7	3.1
	446657	AI335191	Hs.260702	ESTs, Moderately similar to ALU7_HUMAN A	12.6	12.6
	423073	BE252922	Hs.123119	MAD (mothers against decapentaplegic, Dr	12.6	12.6
	424278	AK000723	Hs.144517	hypothetical protein FLJ20716	12.6	12.6
70	451998	AW514021	Hs.245510	ESTs	12.6	7.0
	400860				12.5	23.1
	439579	AF086400		gb:Homo sapiens full length insert cDNA	12.4	12.4
	408312	AF263813	Hs.44198	intracellular membrane-associated calciu	12.4	12.4
	419948	AB041035	Hs.93847	NADPH oxidase 4	12.4	2.4
75	427304	AA781526	Hs.163853	ESTs	12.3	12.3
	419498	AL036591	Hs.20887	hypothetical protein FLJ10392	12.2	12.2
	428137	AA421792	Hs.170999	ESTs	12.2	12.2
	432683	AW995441	Hs.10475	ESTs	12.2	2.0
	408822	AA066080	Hs.202577	Homo sapiens cDNA FLJ12166 fis, clone MA	12.1	12.1
80	453884	AA355925	Hs.38232	KIAA0188 gene product	12.0	5.2
	441440	AI807981	Hs.30495	ESTs	12.0	3.6
	414217	AI309298	Hs.278898	Homo sapiens cDNA: FLJ23165 fis, clone L	12.0	62.7
	410227	AB009284	Hs.61152	exostosins (multiple)-like 2	11.9	2.9
	439444	AI277652	Hs.54578	ESTs	11.9	16.5

433309	AA807060	Hs.126558	ESTs	11.7	9.0
439170	AA332365	Hs.165539	ESTs	11.6	8.7
417160	N76497	Hs.1787	proteolipid protein (Pelizaeus-Merzbache	11.5	7.2
424668	D83702	Hs.151573	cryptochrome 1 (photolyase-like)	11.5	5.8
410811	AW854134	Hs.20924	KIAA1628 protein	11.5	28.2
437124	AA554458	Hs.204200	ESTs	11.5	11.5
418858	AW861605	Hs.21145	Homo sapiens cDNA: FLJ22489 fs, clone H	11.3	11.3
423600	A1633559	Hs.29076	Homo sapiens cDNA: FLJ21841 fs, clone H	11.3	2.8
429393	AA383024	Hs.201603	ESTs, Highly similar to hypothetical pro	11.3	11.3
431103	M57399	Hs.44	pleiotrophin (heparin binding growth fac	11.3	3.4
452092	BE245374	Hs.27842	hypothetical protein FLJ11210	11.3	11.7
431701	AW935490	Hs.14658	ESTs	11.3	2.6
429399	AA452244	Hs.16727	ESTs	11.2	2.2
408988	AL119844	Hs.49476	Homo sapiens clone TUA8 Cri-du-chat regi	11.2	27.8
442671	AJ005658	Hs.134779	EST	11.1	11.1
402624				11.1	11.1
415558	AA885143	Hs.125719	ESTs	11.1	11.1
422390	AW450893	Hs.121830	ESTs, Weakly similar to KIAA0924 protein	11.0	8.8
418475	A1858732	Hs.30443	sentrin/SUMO-specific protease	11.0	6.1
458809	AW972512	Hs.20985	sin3-associated polypeptide, 30kD	11.0	5.6
410297	AA148710	Hs.159441	ESTs	11.0	3.3
444017	U04840	Hs.214	neuro-oncological ventral antigen 1	11.0	11.0
437814	AJ088192	Hs.135474	ESTs, Weakly similar to DDX9_HUMAN ATP-D	10.9	3.3
427194	AA399018	Hs.250835	ESTs	10.8	8.0
432060	AW971364		gb:EST383453 MAGE resequences, MAGL Homo	10.8	10.0
453861	AJ026838	Hs.30120	ESTs	10.8	10.8
408829	NM_006042	Hs.48384	heparan sulfate (glucosamine) 3-O-sulfot	10.6	3.3
416913	AW934714		gb:RC1-DT0001-031289-011-e11 DT0001 Homo	10.6	3.4
418049	AA211467	Hs.190488	hypothetical protein FLJ10120	10.6	10.6
413083	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	10.6	27.2
425264	AA353953	Hs.20369	ESTs, Weakly similar to gonadotropin ind	10.5	2.0
434408	AJ031771	Hs.132586	ESTs	10.5	10.5
451697	AW449774	Hs.257208	ESTs	10.5	6.2
436754	AJ061288	Hs.133437	ESTs, Moderately similar to gonadotropin	10.3	10.3
410298	AJ693821	Hs.182185	ESTs	10.3	2.9
412766	BE544475	Hs.54347	ESTs	10.3	10.3
450689	AJ369275	Hs.243010	ESTs, Moderately similar to RTC0_HUMAN G	10.3	10.3
408331	NM_007240	Hs.44229	dual specificity phosphatase 12	10.3	4.5
442007	AA301118	Hs.142838	Homo sapiens cDNA: FLJ23444 fs, clone H	10.3	10.3
410386	W26187	Hs.3327	Homo sapiens cDNA: FLJ22219 fs, clone H	10.2	2.1
440584	AJ253123	Hs.127356	ESTs, Highly similar to NEST_HUMAN NEST1	10.1	10.1
420892	AW975076	Hs.172589	nuclear phosphoprotein similar to S. cer	10.0	10.0
419594	AA013051	Hs.91417	topoisomerase (DNA) II binding protein	9.9	15.8
419972	AL041465	Hs.294038	ESTs, Moderately similar to ALU2_HUMAN A	9.7	23.2
433730	AK002135	Hs.3542	hypothetical protein FLJ11273	9.6	6.5
434851	AA808164	Hs.116502	ESTs	9.6	6.5
436306	AA805939	Hs.117927	ESTs	9.5	4.7
453331	AJ240665	Hs.8895	ESTs	9.2	5.8
414429	R51494	Hs.71818	ESTs	9.0	6.2
424988	U58515	Hs.154138	chitinase 3-like 2	8.9	18.1
446936	H10207	Hs.47314	ESTs	8.9	3.6
410276	AJ554545	Hs.68301	ESTs	8.8	3.8
453857	AL080235	Hs.35861	DKFZP586E1621 protein	8.8	3.8
448321	NM_005883	Hs.20912	adenomatous polyposis coli like	8.8	2.0
414783	AW069569	Hs.75839	zinc finger protein 6 (CMPX1)	8.7	3.0
441079	AW150697	Hs.107418	ESTs	8.7	2.2
437517	AJ927875	Hs.89858	ribosomal protein L7a	8.8	4.5
409082	AL157488	Hs.50150	Homo sapiens mRNA; cDNA DKFZp564B182 (fr	8.6	12.2
420630	AL133101	Hs.99508	Homo sapiens mRNA; cDNA DKFZp434O0921 (f	8.6	10.4
409260	AW242407	Hs.18479	ESTs	8.5	11.6
442343	AA992480	Hs.129874	ESTs	8.4	4.6
416439	AA180363	Hs.118769	ESTs	8.4	7.2
428054	AJ948689	Hs.266619	ESTs	8.2	9.2
421633	AF121860	Hs.106260	sorting nexin 10	8.2	2.6
433285	AW976944	Hs.237396	ESTs	8.1	3.3
433226	AW503733	Hs.9414	KIAA1488 protein	8.0	13.4
424800	AL035588	Hs.153203	MyoD family inhibitor	8.0	2.5
425681	AB018297	Hs.159183	KIAA0754 protein	7.9	4.8
445034	AW293376	Hs.160323	ESTs	7.9	3.7
435020	AW505076	Hs.301855	DiGeorge syndrome critical region gene 8	7.6	6.4
446985	AL038704	Hs.156827	ESTs, Weakly similar to ALU1_HUMAN ALU S	7.5	7.8
446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	7.5	3.9
418522	AA605038	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	7.5	2.2
439884	AJ720078	Hs.291997	ESTs	7.4	6.9
419723	AL120193	Hs.92614	Homo sapiens growth differentiation fact	7.4	3.5
447896	AJ436124	Hs.294069	ESTs, Weakly similar to ORF2 contains a	7.3	22.1
404210				7.3	40.8
436671	AW137159	Hs.148151	ESTs	7.2	11.8
439231	AW581935	Hs.141480	ESTs	7.2	2.6
418030	BE207573	Hs.83321	neurexin B	7.1	6.4
459290	NM_001548	Hs.34853	inhibitor of DNA binding 4, dominant neg	7.0	6.7
423869	BE409301	Hs.134012	C1q-related factor	7.0	4.9
414825	X06370	Hs.77432	epidermal growth factor receptor (avian	6.9	6.4

	420018	U56387	Hs.94376	proprotein convertase subtilisin/kexin 1	6.9	8.6
	428600	AW863261	Hs.15036	ESTs, Highly similar to AF161358.1 HSPC0	6.9	7.7
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	6.9	3.1
	402504				6.8	7.0
5	417022	NM_014737	Hs.80905	Ras association (RalGDS/AF-6) domain fam	6.8	2.5
	405239	U89281	Hs.11958	oxidative 3 alpha hydroxysteroid dehydro	6.8	2.9
	433577	AW007080	Hs.8817	ESTs	6.6	2.6
	434829	AA789081	Hs.4029	glioma-amplified sequence-41	6.6	13.9
10	413888	AW958264	Hs.103832	ESTs, Weakly similar to TRHY_HUMAN TRICH	6.6	2.2
	451460	AI787550	Hs.209652	ESTs	6.5	13.7
	442145	AI022650	Hs.8117	erbB2-interacting protein ERBIN	6.5	15.8
	437273	AL137451	Hs.120873	ESTs, Highly similar to hypothetical pro	6.5	2.4
	418365	AW014345	Hs.181690	ESTs	6.4	12.8
15	421684	BE281591	Hs.106768	hypothetical protein FLJ10511	6.4	4.3
	449458	AI805078	Hs.208261	ESTs	6.4	2.3
	426413	AA377823		gb:EST90805 Synovial sarcoma Homo sapien	6.3	13.2
	426423	NM_012446	Hs.169833	single-stranded-DNA-binding protein	6.3	10.9
	417709	D87434	Hs.82426	KIAA0247 gene product	6.3	23.3
20	448499	BE813280	Hs.250655	prothymosin, alpha (gene sequence 28)	6.2	2.9
	444880	AW118683	Hs.154150	ESTs	6.2	19.4
	432715	AA247152	Hs.200483	ESTs, Weakly similar to KIAA1074 protein	6.2	12.7
	444864	AW965446	Hs.46637	ESTs, Weakly similar to cDNA EST yk289g5	6.2	4.1
	407792	AI077715	Hs.39384	putative secreted ligand homologous to f	6.2	3.4
25	41962	AL049385	Hs.272251	Homo sapiens mRNA; cDNA DKFZp586M1418 (f	6.1	2.6
	424232	AB015982	Hs.143460	protein kinase C, nu	6.1	14.6
	436443	AW138211	Hs.128746	ESTs	6.1	2.8
	433647	AA603367	Hs.222294	ESTs	6.1	15.0
	449981	AW265634	Hs.133100	ESTs	6.1	3.4
30	448704	AW080932	Hs.249247	heterogeneous nuclear protein similar to	6.1	6.1
	408393	AW015318	Hs.23185	ESTs	6.1	21.6
	450693	AW450461	Hs.203965	ESTs	6.1	2.2
	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	6.0	2.4
	445817	NM_003642	Hs.13340	histone acetyltransferase 1	6.0	10.9
35	440650	R44692	Hs.6640	ESTs	6.0	2.1
	417675	AI808607	Hs.3781	similar to murine leucine-rich repeat pr	6.0	2.4
	411083	N41340	Hs.68318	hypothetical protein FLJ20344	6.0	3.8
	407910	AA650274	Hs.41296	fibronectin leucine rich transmembrane p	6.0	6.0
	402855				6.0	2.6
40	445594	AW058463	Hs.12940	zinc-fingers and homeoboxes 1	6.0	11.8
	418791	AA935633	Hs.194628	ESTs	5.9	6.7
	409262	AK000631	Hs.52256	hypothetical protein FLJ20624	5.9	2.3
	435677	AA694142	Hs.293726	ESTs	5.9	11.8
	430334	AI824719	Hs.47557	ESTs	5.9	7.5
45	452834	AI838627	Hs.105685	ESTs	5.9	2.6
	427315	AA179949	Hs.178563	Homo sapiens mRNA; cDNA DKFZp584N0763 (f	5.8	3.1
	428250	AW809208	Hs.183297	DKFZP566F2124 protein	5.8	2.0
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	5.8	2.5
	417115	AW962792	Hs.1086	small nuclear ribonucleoprotein polypept	5.8	16.0
50	436758	AW977167	Hs.155272	ESTs	5.8	3.8
	446332	AK001635	Hs.14838	hypothetical protein FLJ10773	5.7	5.1
	423943	AF183570	Hs.135756	polymerase (DNA-directed) kappa	5.7	11.1
	428180	AI129767	Hs.182874	Homo sapiens cDNA: FLJ21929 fis, clone H	5.6	7.1
	424343	AW956360	Hs.4748	ESTs, Highly similar to JN0902 plitular	5.6	2.2
	417318	AW953937	Hs.12891	ESTs	5.6	25.0
55	423582	BE000831	Hs.23837	Homo sapiens cDNA FLJ11812 fis, clone HE	5.6	4.1
	427472	AA522539	Hs.131250	transposon-derived Buster3 transposase-1	5.4	3.5
	434701	AA460479	Hs.4096	KIAA0742 protein	5.4	21.2
	430147	R50704	Hs.234434	hairly/enhancer-of-split related with YRP	5.3	2.7
60	411019	AW993097	Hs.48617	Homo sapiens cDNA FLJ12540 fis, clone NT	5.3	4.1
	424939	AK000059	Hs.153681	Homo sapiens NY-REN-62 antigen mRNA, par	5.3	2.4
	424028	AF055084	Hs.153692	KIAA0686 protein	5.3	2.7
	444534	AW271626	Hs.42294	ESTs	5.3	2.1
	426171	AI128606	Hs.301454	ESTs	5.2	3.8
65	431843	AA516420	Hs.183526	ESTs	5.2	6.2
	438204	AI589845	Hs.128690	ESTs	5.2	6.8
	424635	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fis, clone PL	5.2	8.4
	436223	AK001884	Hs.23799	ESTs	5.2	2.4
	450649	NM_001429	Hs.297722	Human DNA sequence from clone RP1-85F18	5.2	15.3
70	441889	AI123705	Hs.106932	ESTs	5.2	2.2
	443392	AI055821	Hs.293420	ESTs	5.1	3.3
	416179	R19015	Hs.79067	MAD (mothers against decapentaplegic, Dr	5.1	16.7
	452167	N75238	Hs.13075	Homo sapiens cDNA: FLJ23013 fis, clone L	5.1	18.7
	434001	AW950905	Hs.3897	serine (or cysteine) proteinase inhibitor	5.0	2.4
75	458435	AI418718	Hs.144121	ESTs, Weakly similar to dJ37E16.2 (H.sap	5.0	3.9
	433588	T85301		gb:yd78d06.s1 Soares fetal liver spleen	5.0	2.8
	452040	AW973242	Hs.293690	ESTs	5.0	4.5
	404029				5.0	4.3
	421141	AW117281	Hs.125914	ESTs	5.0	2.1
80	402605				4.9	4.2
	435839	AF249744	Hs.25951	Rho guanine nucleotide exchange factor (	4.9	2.5
	416404	AA180138	Hs.107924	ESTs	4.9	2.4
	435615	Y15065	Hs.4975	potassium voltage-gated channel, KQT-Bk	4.9	7.2
	448425	AI500359	Hs.233401	ESTs	4.9	4.9

5	445773	H73456	Hs.13289	Homo sapiens mRNA; cDNA DKFZp761M0111 (f	4.9	2.9
	448451	AW015994		gb:U1-H-B10p-ebh-g-09-0-UL.s1 NC_CGAP_S	4.9	2.2
	444838	AV651680	Hs.208558	ESTs	4.8	6.7
	452438	BE514230	Hs.29595	JM4 protein	4.8	2.7
	443898	AW804256	Hs.9950	Sec61 gamma	4.8	7.2
	452776	AA194540	Hs.13522	ESTs	4.8	3.4
	426108	AA622037	Hs.166468	programmed cell death 5	4.8	16.7
	416774	AI005169	Hs.28274	Homo sapiens cDNA: FLJ22049 fis, clone H	4.8	3.2
10	427704	AW971083	Hs.292882	ESTs	4.8	23.8
	433588	AI056872	Hs.133386	ESTs	4.8	12.8
	410108	AA081659	Hs.191098	KIAA1479 protein	4.7	2.1
	433556	W56321	Hs.111460	Homo sapiens cDNA: FLJ21715 fis, clone C	4.7	11.2
	418962	AA714835	Hs.271853	ESTs	4.7	2.2
	404049				4.7	3.0
15	436222	AI208737	Hs.122810	Homo sapiens cDNA FLJ11489 fis, clone HE	4.7	3.3
	425234	AW152225	Hs.165809	ESTs	4.7	3.1
	426490	NM_001621	Hs.170087	aryl hydrocarbon receptor	4.7	9.1
	426514	BE616833	Hs.301122	bone morphogenetic protein 7 (osteogenic	4.7	2.7
20	428722	U76456	Hs.190787	tissue inhibitor of metalloproteinase 4	4.6	6.7
	451989	AF169797	Hs.27413	adaptor protein containing pH domain, PT	4.6	13.4
	412490	AW803564	Hs.288850	Homo sapiens cDNA: FLJ22528 fis, clone H	4.6	18.4
	422488	AI679958	Hs.152060	ESTs	4.6	7.7
	428882	NM_000346	Hs.2316	SRY (sex-determining region Y)-box 9 (ca	4.6	4.6
25	413724	AA131466	Hs.23767	Homo sapiens cDNA FLJ12666 fis, clone NT	4.6	11.9
	442495	AI184717		gb:qd64b01.x1 Soares_tes1s_NHT Homo sap	4.6	4.6
	403549				4.5	11.6
	456209	W60633	Hs.297792	ESTs	4.5	5.1
30	421181	NM_005574	Hs.184585	UIM domain only 2 (rhomboin-like 1)	4.5	10.6
	439566	AF086387		gb:Homo sapiens full length insert cDNA	4.4	2.6
	448329	NM_013272	Hs.14805	solute carrier family 21 (organic anion	4.4	17.2
	446488	AB037782	Hs.15119	KIAA1361 protein	4.4	8.4
	426110	NM_002913	Hs.166563	replication factor C (activator 1) 1 (14	4.4	2.5
	427413	BE547647	Hs.177781	superoxide dismutase 2, mitochondrial	4.4	14.3
35	424340	AA339038	Hs.7033	ESTs	4.4	3.9
	421552	AF026692	Hs.105700	secreted frizzled-related protein 4	4.3	31.1
	422033	AW245805	Hs.110903	claudin 5 (transmembrane protein deleted	4.3	6.1
	434476	AW858520	Hs.271825	ESTs	4.3	4.5
	420582	BE047878	Hs.99093	Homo sapiens chromosome 19, cosmid R2837	4.3	3.6
40	419904	AA974411	Hs.18672	ESTs	4.3	17.1
	407939	W05608		gb:za85e07.r1 Soares_fetal_lung_NbHL19W	4.3	9.0
	425836	AW955696	Hs.94842	ESTs	4.3	3.2
	426304	AA374532	Hs.297985	ESTs	4.3	6.6
45	439653	AW021103	Hs.6631	hypothetical protein FLJ20373	4.3	2.3
	424723	BE409813	Hs.152337	protein arginine N-methyltransferase 3(h	4.3	2.5
	426064	BE387014	Hs.166146	Homer, neuronal immediate early gene, 3	4.2	4.1
	409509	AL036923	Hs.127006	ESTs	4.2	16.4
	424391	BE550112	Hs.112712	ESTs	4.2	3.8
	425248	AW957442	Hs.252766	ESTs	4.2	11.1
50	418259	AA215404	Hs.137289	ESTs	4.2	19.3
	445525	BE149866	Hs.14831	ESTs	4.2	3.1
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	4.2	34.8
	430935	AW072916	Hs.115654	ESTs	4.2	3.0
	442233	AW967149	Hs.28439	ESTs, Weakly similar to ORF2 [M.musculus	4.2	2.4
55	416959	D28459	Hs.80612	ubiquitin-conjugating enzyme E2A (RAD6 h	4.1	15.3
	437097	N45312	Hs.48506	ESTs	4.1	15.6
	428189	AA424030	Hs.46627	ESTs	4.1	3.6
	434963	AW974957	Hs.288719	Homo sapiens cDNA FLJ12142 fis, clone MA	4.1	12.2
	425500	AB011541	Hs.158200	EGF-like-domain, multiple 4	4.1	2.8
60	435177	AI018174	Hs.42936	ESTs	4.1	2.1
	418357	Z44718	Hs.301010	ESTs, Highly similar to AF159851 1 Rho G	4.1	4.1
	419086	NM_000216	Hs.89591	Kallmann syndrome 1 sequence	4.1	4.1
	436557	W15573	Hs.5027	ESTs	4.0	2.1
	425588	F07396	Hs.48751	ESTs	4.0	2.2
65	423905	AW579960	Hs.135150	lung type-I cell membrane-associated gly	4.0	3.6
	437095	D14661	Hs.119	Wilms' tumour 1-associating protein	4.0	10.0
	425332	AA633306	Hs.127279	ESTs	4.0	10.9
	431558	AF018028	Hs.260039	sarcospan (Kras oncogene-associated gene	4.0	3.8
	427209	H05609	Hs.92423	KIAA1566 protein	4.0	3.1
70	435468	AW382803	Hs.166271	ESTs	4.0	2.2
	416773	AK000340	Hs.79828	hypothetical protein FLJ20333	4.0	2.6
	440483	AI200836	Hs.150386	ESTs	4.0	2.5
	444821	AA053584	Hs.12040	STE20-like kinase	4.0	10.4
	433873	AW156913	Hs.150478	ESTs, Weakly similar to KIAA0587 protein	4.0	2.3
75	420028	AB014680	Hs.8786	carbohydrate (chondroitin 6/keratan) sul	3.9	2.8
	445706	AW807831	Hs.190488	hypothetical protein FLJ10120	3.9	3.8
	424530	AI632083	Hs.28511	ESTs	3.9	2.2
	446851	AW007332	Hs.16261	Homo sapiens cDNA: FLJ22063 fis, clone H	3.9	16.0
	424720	M89907	Hs.152292	SWI/SNF related, matrix associated, acti	3.9	4.5
80	409456	U34962	Hs.54473	cardiac-specific homeo box	3.9	8.0
	420439	AW270041	Hs.193053	eukaryotic translation initiation factor	3.9	7.9
	447340	AW981327	Hs.280833	ESTs	3.9	2.1
	430887	N66801	Hs.260287	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.9	2.5
	409381	NM_005982	Hs.54416	elne oculis homeobox (Drosophila) homolo	3.9	4.6

5	426509	M31166	Hs.2050	pentaxin-related gene, rapidly induced b	3.9	4.0
	410079	U94362	Hs.58589	glycogenin 2	3.9	18.3
	426818	AA554827	Hs.124841	ESTs, Weakly similar to ALU5_HUMAN ALU S	3.9	3.0
	435232	NM_001262	Hs.4854	cyclin-dependent kinase inhibitor 2C (p1	3.8	4.0
	427228	AA115770	Hs.174051	small nuclear ribonucleoprotein 70kD pol	3.8	7.9
	443801	AW206942	Hs.253594	ESTs	3.8	3.4
	450746	D82673	Hs.169921	general transcription factor II, I, pseu	3.8	2.2
	443837	AI984625	Hs.9884	spindle pole body protein	3.8	6.5
10	435760	AF231922	Hs.213004	chromosome 21 open reading frame 62	3.8	2.2
	426757	AW205640	Hs.158206	ESTs	3.7	3.1
	443101	AI268938	Hs.129872	sperm surface protein	3.7	2.4
	440118	AB040893	Hs.6368	KIAA1460 protein	3.7	3.5
	410812	AW502698	Hs.118152	ESTs	3.7	22.5
	435869	AF255910	Hs.54650	vascular endothelial junction-associated	3.7	4.2
15	433208	AW002834	Hs.24095	ESTs	3.7	16.0
	432357	AA452506	Hs.274412	similar to yeast Upf3, variant A	3.7	2.6
	413916	N49813	Hs.75615	apolipoprotein C-II	3.7	5.4
	429766	AA612710	Hs.146140	ESTs	3.7	3.2
	437470	AL1390147	Hs.134742	hypothetical protein DKFZp547D065	3.7	6.4
20	438459	T49300	Hs.35304	Homo sapiens cDNA FLJ13655 fis, clone PL	3.7	10.7
	420361	N92054	Hs.206910	ESTs	3.7	18.7
	408819	AW163483	Hs.48320	DKFZP566B1346 protein	3.7	8.8
	411960	R77776	Hs.18103	ESTs	3.7	2.3
25	435923	BE301930	Hs.5010	Homo sapiens clone 24672 mRNA sequence	3.7	2.2
	440145	AW021433	Hs.250863	ESTs	3.7	3.8
	453740	AL120295		gb:DKFZp761M067.s1 761 (synonym: hamy2)	3.6	3.0
	440975	AW499914	Hs.7579	hypothetical protein FLJ10402	3.6	2.0
	443135	A376331	Hs.156103	ESTs	3.6	12.4
30	419687	AI638659	Hs.227699	ESTs, Weakly similar to Yhr217cp [S.cere	3.6	2.7
	451029	AA852097	Hs.25829	ras-related protein	3.6	2.9
	414512	AL044338	Hs.6831	golgi resident protein GCP60	3.6	10.5
	410853	H04588	Hs.30469	ESTs	3.6	23.9
	419900	AI469960	Hs.170698	ESTs	3.6	3.6
35	429673	AA884407	Hs.211555	protein tyrosine phosphatase, non-recept	3.6	7.5
	428290	AI932995	Hs.183475	Homo sapiens clone 25061 mRNA sequence	3.6	9.6
	444381	BE387335	Hs.283713	ESTs, Weakly similar to CA54_HUMAN COLLA	3.6	4.9
	442104	L20971	Hs.188	phosphodiesterase 4B, cAMP-specific (dun	3.6	2.1
	441269	AW015208	Hs.178784	ESTs	3.6	2.8
40	447961	W32791	Hs.170405	ESTs	3.5	4.6
	447735	AA775268	Hs.6127	Homo sapiens cDNA: FLJ23020 fis, clone L	3.5	2.1
	437580	AA761075	Hs.293567	ESTs	3.5	3.5
	447710	AI420523	Hs.161282	ESTs	3.5	3.5
	436446	AW016809	Hs.119021	ESTs	3.5	2.2
45	448412	AI219083	Hs.42532	ESTs, Moderately similar to ALU8_HUMAN A	3.5	4.1
	409712	AA167385	Hs.13583	ESTs	3.5	3.8
	404048				3.5	3.2
	440516	S42303	Hs.161	cadherin 2, type 1, N-cadherin (neuronal	3.5	5.1
	409342	AU077058	Hs.54089	BRCA1 associated RING domain 1	3.5	10.6
50	456508	AA502764	Hs.123469	ESTs, Weakly similar to AF208856 1 BM-01	3.5	3.8
	426101	AL049987	Hs.166361	Homo sapiens mRNA: cDNA DKFZp564F112 (fr	3.5	32.2
	436252	AI539519	Hs.120969	Homo sapiens cDNA FLJ11582 fis, clone HE	3.5	4.6
	433854	AA610649		gb:np95c03.s1 NCL_CGAP_Thy1 Homo sapiens	3.5	3.5
	408495	W68798	Hs.237731	ESTs	3.5	6.1
55	418801	AA228366	Hs.115122	ESTs	3.5	5.1
	422493	AW474183	Hs.233816	ESTs	3.5	15.2
	428141	D60402	Hs.182611	solute carrier family 11 (proton-coupled	3.5	2.4
	414591	AI888490	Hs.65902	ESTs	3.5	8.3
	439627	BE621702	Hs.29076	Homo sapiens cDNA: FLJ21841 fis, clone H	3.5	30.2
60	444969	AI203334	Hs.160628	ESTs	3.5	3.1
	435370	AI964074	Hs.225838	ESTs	3.5	3.0
	443228	W24781	Hs.293798	ESTs	3.4	4.6
	414612	BE274552	Hs.76578	protein inhibitor of activated STAT3	3.4	5.0
	437410	AW023340	Hs.14880	ESTs	3.4	2.7
65	444172	BE147740	Hs.104558	ESTs	3.4	12.9
	428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino	3.4	2.8
	437860	AA333083	Hs.279898	Homo sapiens cDNA: FLJ23165 fis, clone L	3.4	4.0
	428776	AW016838	Hs.155647	ESTs, Highly similar to R29144 1 [H.sapi	3.4	2.5
	409493	AA386182	Hs.193482	ESTs	3.4	3.4
70	432559	AW452948	Hs.257631	ESTs	3.4	6.3
	451455	AI937227	Hs.8821	liver-expressed antimicrobial peptide	3.4	6.1
	444153	AK001610	Hs.10414	hypothetical protein FLJ10748	3.4	2.6
	422872	BE326786	Hs.187846	ESTs	3.4	2.2
	414761	AU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	3.4	2.6
75	416131	L03532	Hs.79024	heterogeneous nuclear ribonucleoprotein	3.4	9.5
	408576	NM_003542	Hs.46423	H4 histone family, member G	3.4	3.4
	431770	BE221880	Hs.268555	5'-3' exonuclease 2	3.4	21.2
	428030	BE243933	Hs.108642	zinc finger protein 22 (KOX 15)	3.4	2.1
	422573	AW297985	Hs.28777	H2A histone family, member L	3.4	3.7
80	436865	AW880358	Hs.190488	hypothetical protein FLJ10120	3.4	7.8
	442091	AW770493	Hs.195904	guanine nucleotide binding protein (G pr	3.4	2.9
	418699	BE539639	Hs.173030	ESTs, Weakly similar to ALU8_HUMAN ALU S	3.4	5.5
	434577	R37316	Hs.179769	Homo sapiens cDNA: FLJ22487 fis, clone H	3.4	3.9
	430314	AA369601	Hs.239138	pre-B-cell colony-enhancing factor	3.4	16.8



5	447279	AA325308	Hs.18016	Homo sapiens mRNA; cDNA DKFZp586H0324 (l	3.3	3.0
	410020	T86315	Hs.728	ribonuclease, RNase A family, 2 (liver,	3.3	5.8
	447272	NM_014827	Hs.17969	KIAA0863 gene product	3.3	13.4
	407656	AW747986	Hs.37443	Homo sapiens mRNA; cDNA DKFZp43482119 (l	3.3	2.3
	435354	AA678267	Hs.117115	ESTs	3.3	5.5
	443884	N20617	Hs.226627	leptin receptor	3.3	8.6
	444984	H15474	Hs.12214	Homo sapiens clone 23716 mRNA sequence	3.3	2.0
	431053	S40369	Hs.24914	Glutamate receptor subunit	3.3	2.4
10	424682	AW604804	Hs.151717	KIAA0437 protein	3.3	13.7
	457972	AI419060	Hs.47448	ESTs	3.3	4.2
	424762	AL119442	Hs.183684	eukaryotic translation initiation factor	3.3	3.2
	438666	AW014493	Hs.126727	ESTs	3.3	10.8
	447796	AW953822	Hs.223025	RAB31, member RAS oncogene family	3.3	4.2
	426751	W92744	Hs.22664	ESTs	3.3	2.6
15	438251	BE515065	Hs.5092	nucleolar protein (KKE/D repeat)	3.3	3.9
	452688	AA721140	Hs.49930	ESTs, Weakly similar to B34087 hypothetical	3.3	4.9
	416359	AL042210	Hs.16493	hypothetical protein DKFZp762N2316	3.3	4.2
	424080	X99699	Hs.139262	XIAP associated factor-1	3.3	2.9
20	434987	AW976114	Hs.293273	ESTs	3.3	2.2
	428642	NM_014899	Hs.186006	KIAA0878 protein	3.3	5.7
	420372	AW960049	Hs.293860	ESTs, Weakly similar to A49618 probable	3.3	5.5
	422224	NM_013982	Hs.113264	neuregulin 2	3.2	3.0
	432482	L19267	Hs.275924	dystrophin myotonia-containing WD repea	3.2	2.7
25	439963	AW247529	Hs.6793	platelet-activating factor acetylhydrola	3.2	2.0
	428418	AI368826	Hs.30654	ESTs	3.2	2.4
	416728	AB024597	Hs.79658	casein kinase 1, epsilon	3.2	2.8
	416224	NM_002902	Hs.79088	reticulocalbin 2, EF-hand calcium bindin	3.2	2.2
	429803	W81489	Hs.223025	RAB31, member RAS oncogene family	3.2	4.3
30	431387	AI878854	Hs.252229	v-maf musculosarcoma neurofibrosarcoma (a	3.2	2.8
	404171				3.2	35.8
	435575	AF213457	Hs.44234	triggering receptor expressed on myeloid	3.2	2.6
	426421	AW367884	Hs.169832	zinc finger protein 42 (myeloid-specific	3.2	3.8
	445070	NM_000677	Hs.258	adenosine A3 receptor	3.2	7.6
35	407047	X65965		gb.H.sapiens SOD-2 gene for manganese su	3.2	62.0
	446006	NM_004403	Hs.13530	deafness, autosomal dominant 5	3.2	2.2
	430890	X54232	Hs.2639	glypican 1	3.2	4.3
	439807	AA376417	Hs.173501	Homo sapiens mRNA for FLJ00008 protein,	3.2	2.3
	430412	AW341754	Hs.189305	ESTs	3.2	2.0
40	42807	AL049274	Hs.8736	Homo sapiens mRNA; cDNA DKFZp564H203 (tr	3.2	2.7
	420253	AB560555	Hs.96200	neighbor of A-kinase anchoring protein 9	3.2	2.9
	436042	AF284422	Hs.119178	cation-chloride cotransporter-interactin	3.2	4.8
	423422	AC005176	Hs.128426	NY-REN-24 antigen	3.2	4.0
	413020	R98738		gb.yr31h09.r1 Soares fetal liver spleen	3.2	4.1
45	452877	AI250789	Hs.32478	ESTs	3.2	4.0
	418113	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	3.1	9.0
	421097	AI280112	Hs.125232	Homo sapiens cDNA FLJ13265 fls, clone OV	3.1	2.0
	450219	AI826999	Hs.224624	ESTs	3.1	23.7
	434258	AI378817	Hs.191847	ESTs	3.1	3.4
	421407	T82331	Hs.127453	ESTs	3.1	3.9
50	451198	AW964541	Hs.11500	Homo sapiens cDNA: FLJ21127 fls, clone C	3.1	3.9
	445664	AW968638	Hs.237691	ESTs	3.1	7.9
	411089	AA456454	Hs.118637	Homo sapiens cDNA FLJ13365 fls, clone PL	3.1	6.0
	458050	AA834708		gb:cd99d04.s1 NCI_CGAP_Ov2 Homo sapiens	3.1	4.4
55	454140	AB040888	Hs.41793	hypothetical protein FLJ10474	3.1	2.7
	417270	AA429615	Hs.98593	Homo sapiens cDNA: FLJ23233 fls, clone C	3.1	2.4
	427951	AI826125	Hs.43546	ESTs	3.1	2.3
	443693	AI344782	Hs.9683	protein-kinase, interferon-inducible dou	3.1	7.2
	413367	NM_006517	Hs.75317	solute carrier family 18 (monocarboxylic	3.1	2.6
60	429402	AF116571	Hs.201671	SRY (sex determining region Y)-box 13	3.1	6.5
	447752	M73700	Hs.347	lactotransferin	3.1	19.4
	408949	AF189011	Hs.49163	putative ribonuclease III	3.1	3.7
	416039	R06859	Hs.193172	ESTs	3.1	3.8
	447343	AA266641	Hs.236894	ESTs, Highly similar to LRP1_HUMAN LOW-D	3.1	2.2
65	424441	X14850	Hs.147097	H2A histone family, member X	3.1	3.2
	435163	AA668884	Hs.18155	ESTs	3.1	2.1
	428712	AW085131	Hs.190452	KIAA0365 gene product	3.1	2.7
	434542	AA769310	Hs.61260	hypothetical protein FLJ13164	3.1	14.3
	428147	AW629965	Hs.234983	ESTs	3.1	2.7
70	415825	Y18024	Hs.78877	inositol 1,4,5-trisphosphate 3-kinase B	3.1	2.5
	422170	AI791949	Hs.112432	anti-Müllerian hormone	3.1	8.1
	448801	N57423	Hs.179898	HSPC055 protein	3.0	2.0
	413542	BE295928	Hs.75424	Inhibitor of DNA binding 1, dominant neg	3.0	18.3
	431562	AI884334	Hs.11637	ESTs	3.0	3.9
75	410274	AA381807	Hs.61762	hypoxia-inducible protein 2	3.0	3.0
	458962	NM_005859	Hs.25180	purine-rich element binding protein A	3.0	3.0
	436277	R88520	Hs.120917	ESTs	3.0	2.7
	453288	AW583292	Hs.274412	similar to yeast Upt3, variant A	3.0	3.0
	447471	AF039843	Hs.18676	sprouty (Drosophila) homolog 2	3.0	4.1
80	442554	AW487376	Hs.129640	ESTs	3.0	4.7
	441486	AW673081	Hs.54828	ESTs	3.0	3.0
	420297	AI628272	Hs.88323	ESTs	3.0	8.1
	445101	T75202	Hs.12314	Homo sapiens mRNA; cDNA DKFZp586C1019 (l	3.0	18.7
	453405	AI567972	Hs.49918	ESTs	3.0	9.6

	434521	NM_002267	Hs.3886	importin alpha 3 (importin alpha 4)	3.0	9.3
	447948	AI620923	Hs.46679	ESTs	3.0	10.1
	445756	AA290690	Hs.288493	ESTs	3.0	3.5
5	413243	AA769268	Hs.193657	ESTs	3.0	5.9
	422845	AA317841	Hs.301838	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.0	2.2
	419409	AW297831	Hs.143792	ESTs	3.0	2.1
	446441	AK001782	Hs.15093	hypothetical protein	3.0	2.1
	427150	BE616183	Hs.173737	ras-related C3 botulinum toxin substrate	3.0	4.1
10	421043	BE379455	Hs.89072	ESTs	3.0	3.0
	427239	BE270447	Hs.174070	ubiquitin carrier protein	3.0	4.1
	433312	AI241331	Hs.131765	ESTs	3.0	11.0
	415102	M31899	Hs.77829	excision repair cross-complementing rods	3.0	6.0
	414702	L22065	Hs.76932	cell division cycle 34	3.0	3.3
15	428573	AW601325	Hs.274472	high-mobility group (nonhistone chromoso	3.0	15.8
	422676	D28481	Hs.1570	histamine receptor H1	3.0	2.1
	451693	BE220445	Hs.279635	ESTs	3.0	2.3
	412420	AL035668	Hs.73853	bone morphogenetic protein 2	3.0	10.5
	424005	AB033041	Hs.137507	KIAA1215 protein	3.0	3.9
20	440769	BE561793		gb:601346842F1 NIH_MGC_8 Homo sapiens cD	3.0	5.1
	428832	AA578229		gb:60122b12s1 NCI_CGAP_HSC1 Homo sapiens	3.0	2.3
	430293	AI416988	Hs.238272	Inositol 1,4,5-triphosphate receptor, ty	3.0	6.3
	450883	NM_001348	Hs.25619	death-associated protein kinase 3	3.0	5.6
	407879	AA045464	Hs.6557	ESTs	2.8	7.0
25	426167	AF039023	Hs.167496	Homo sapiens cDNA FLJ11120 fis, clone PL	2.9	2.6
	435281	AB020699	Hs.4864	KIAA0892 protein	2.9	3.9
	432339	AW411259	Hs.25945	ESTs	2.9	2.9
	440524	R71264	Hs.16798	ESTs	2.9	9.7
	408083	BE383668	Hs.42484	hypothetical protein FLJ10618	2.9	4.4
30	427729	AB033100	Hs.300846	Homo sapiens cDNA FLJ11744 fis, clone HE	2.9	3.1
	422072	AB018255	Hs.111138	KIAA0712 gene product	2.9	2.9
	435904	AF281655	Hs.8910	1,2-alpha-mannosidase IC	2.9	3.6
	440100	BE382685	Hs.158549	ESTs	2.9	3.6
35	446356	AL120837	Hs.20993	high-glucose-regulated protein 8	2.9	13.9
	428005	AW302245	Hs.181390	casein kinase 1, gamma 2	2.9	3.7
	403019	AA834626	Hs.66716	RAD54 (S.cerevisiae)-like	2.9	5.8
	419175	AW270037	Hs.178507	KIAA0779 protein	2.9	2.3
	433592	NM_004642	Hs.3436	deleted in oral cancer (mouse, homolog)	2.9	2.3
	413922	AI535895	Hs.221024	ESTs	2.9	2.8
40	428593	AW207440	Hs.185973	degenerative spermatocyte (homolog Dros	2.9	3.3
	441789	D52059	Hs.7972	KIAA0871 protein	2.9	2.1
	459107	AA811881	Hs.28505	ubiquitin-conjugating enzyme E2H (homolo	2.9	2.8
	446560	BE613183	Hs.23213	ESTs	2.9	3.0
	425304	AA463844	Hs.31339	fibroblast growth factor 11	2.9	3.3
45	434846	AW295389	Hs.119768	ESTs	2.9	5.1
	408146	R45621	Hs.81057	ESTs, Moderately similar to CL3BC [Rnor	2.9	5.1
	446644	NM_003272	Hs.15791	transmembrane 7 superfamily member 1 (up	2.9	2.8
	446808	AA703226	Hs.16193	Homo sapiens mRNA; cDNA DKFZp586B211 (fr	2.9	8.5
	433017	Y15067	Hs.279914	zinc finger protein 232	2.9	2.2
50	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotactin)	2.9	4.5
	444706	AK000398	Hs.11747	hypothetical protein FLJ20391	2.9	3.6
	407925	BE002320	Hs.287864	Homo sapiens cDNA FLJ14030 fis, clone HE	2.9	2.1
	431730	AF208856	Hs.268122	hypothetical protein	2.9	2.5
	447118	AB014599	Hs.17411	KIAA0699 protein	2.8	2.1
55	453486	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	2.8	7.4
	425227	H84455	Hs.40639	ESTs	2.8	2.3
	456534	X91195	Hs.100623	phospholipase C, beta 3, neighbor pseudo	2.8	76.2
	421465	AK001020	Hs.104627	Homo sapiens cDNA FLJ10158 fis, clone HE	2.8	5.1
	409095	AW337272	Hs.293656	ESTs	2.8	34.0
60	424066	Z99348	Hs.112461	ESTs	2.8	2.1
	432945	AL043683	Hs.271357	ESTs, Weakly similar to unnamed protein	2.8	11.9
	414079	H19184	Hs.205230	ESTs	2.8	2.1
	414359	M62194	Hs.75929	cadherin 11, type 2, OB-cadherin (osteob	2.8	3.9
	436890	AA827756	Hs.135049	ESTs	2.8	4.9
65	430354	AA954810	Hs.239784	human homolog of Drosophila Scribble	2.8	5.2
	458367	AA088470	Hs.83135	p53-responsive gene 6	2.8	4.4
	412014	AI620650	Hs.43761	ESTs	2.8	4.8
	426727	AF078847	Hs.191356	general transcription factor IIF, polype	2.8	6.7
	447942	F12628	Hs.155470	zinc finger protein 38 (KOX 25)	2.8	2.2
70	426432	AF001601	Hs.169857	paraoxonase 2	2.8	3.5
	439189	AI951185	Hs.144630	nuclear receptor subfamily 2, group F, m	2.8	2.5
	445756	AW028485	Hs.26136	ESTs	2.8	4.1
	432148	AW504912	Hs.81907	ESTs, Moderately similar to ALU4_HUMAN A	2.8	2.6
	405649				2.8	3.8
75	414473	BE302693		gb:ba74c02y1 NIH_MGC_20 Homo sapiens cD	2.8	2.4
	443839	AW139834	Hs.143321	ESTs	2.8	2.1
	448804	AW512213	Hs.42500	ADP-ribosylation factor-like 5	2.8	2.7
	426825	AL133415	Hs.2064	vimentin	2.8	25.0
	417528	H47315	Hs.27519	ESTs	2.8	11.6
80	453657	W23237	Hs.296162	ESTs	2.8	3.2
	432714	Y12059	Hs.278675	bromodomain-containing 4	2.8	8.7
	441072	AW275480	Hs.39504	ESTs	2.7	2.7
	441297	AW403084	Hs.7768	ubiquitin-conjugating enzyme E2E 1 (homo	2.7	2.2
	443849	BE566066	Hs.9893	ASB-3 protein	2.7	3.0

5	408243	Y00787	Hs.524	interleukin 8	2.7	3.8
	446243	BE296396	Hs.14512	Homo sapiens cDNA FLJ11761 fs, clone HE	2.7	3.3
	432238	AL133057	Hs.274135	Homo sapiens mRNA; cDNA DKFZp434K1815 (f	2.7	3.0
	433944	AL117518	Hs.3686	KIAA0978 protein	2.7	3.1
	411400	AA311919	Hs.69851	GAR1 protein	2.7	16.0
	435840	AW450376	Hs.130803	ESTs, Highly similar to T00367 hypotheti	2.7	4.1
	428281	AA194554	Hs.183434	ATPase, H+ transporting, lysosomal (vacu	2.7	3.2
	426340	Z97989	Hs.169370	FYN oncogene related to SRC, FGR, YES	2.7	2.0
10	408320	A1125867	Hs.20734	ESTs	2.7	4.7
	422363	T55979	Hs.115474	replication factor C (activator 1) 3 (38	2.7	2.2
	436440	AI471862	Hs.196008	Homo sapiens cDNA FLJ11723 fs, clone HE	2.7	4.7
	408912	AB011084	Hs.48924	KIAA0512 gene product	2.7	2.1
	419304	A1271326	Hs.146101	ESTs	2.7	3.4
15	415045	AA321559	Hs.38270	Homo sapiens cDNA: FLJ20984 fs, clone C	2.7	2.3
	441872	BE567100	Hs.154938	hypothetical protein MDS025	2.7	2.3
	422343	A1628633		gb:U77405.x1 NCL_CGAP_K1d11 Homo sapien	2.7	2.5
	415539	A1733981	Hs.72472	ESTs	2.7	2.7
	443823	BE089782	Hs.9877	hypothetical protein	2.7	4.7
20	419881	AA328340	Hs.44649	ESTs	2.7	3.3
	429165	BE242291	Hs.197540	hypoxia-inducible factor 1, alpha subunit	2.7	5.5
	431319	AA873350		gb:oh64h02.s1 NCL_CGAP_K1d5 Homo sapiens	2.7	65.9
	430219	X99209	Hs.235887	HMT1 (hnRNP methyltransferase, S. cerevis	2.7	3.1
	421016	AA504583	Hs.101047	transcription factor 3 (E2A immunoglobul	2.7	5.2
25	417259	AW903838	Hs.81800	chondroitin sulfate proteoglycan 2 (vers	2.7	10.7
	431747	AW979134	Hs.10700	hypothetical protein	2.7	2.9
	408085	N25929	Hs.42500	ADP-ribosylation factor-like 5	2.7	7.8
	426218	AF119043	Hs.168005	transcriptional intermediary factor 1 ga	2.7	4.5
	434845	BE267057	Hs.4200	hypothetical protein R32164_1	2.7	4.8
30	451644	N23235	Hs.30567	ESTs	2.7	2.3
	428408	W74437	Hs.188757	Homo sapiens mRNA; cDNA DKFZp564M113 (fr	2.7	5.7
	446627	AI973016	Hs.15725	hypothetical protein SBBI48	2.7	2.9
	450187	AA446404	Hs.24563	NTF2-related export protein 1	2.7	9.9
	408821	AL050385	Hs.48332	NIMA (never in mitosis gene a)-related k	2.7	2.1
35	452068	W76412	Hs.57877	ESTs	2.7	2.1
	431128	AL137751	Hs.263671	Homo sapiens mRNA; cDNA DKFZp434I0812 (f	2.7	6.2
	429025	AI399910	Hs.4842	ESTs	2.7	2.9
	421114	AW975051	Hs.293156	ESTs	2.7	8.8
	428755	D87454	Hs.192966	KIAA0265 protein	2.7	3.0
40	416391	AI878927	Hs.79284	mesoderm specific transcript (mouse) hom	2.7	5.7
	414283	AIW60011	Hs.154993	ESTs	2.7	5.9
	425262	D87119	Hs.155418	GS3955 protein	2.7	3.7
	447726	AL137638	Hs.19368	Homo sapiens mRNA; cDNA DKFZp434J065 (fr	2.7	14.3
	424623	AW963062	Hs.165809	ESTs	2.7	5.6
45	444772	AW450800	Hs.176859	ESTs	2.7	2.7
	428419	U49436	Hs.286236	eukaryotic translation initiation factor	2.7	4.6
	441049	W88920	Hs.29341	hypothetical protein FLJ22376	2.7	4.5
	412758	Y07818	Hs.74568	dihydropyrimidinase-like 3	2.6	5.1
	447720	AL038765	Hs.181304	ESTs	2.6	3.2
50	419708	AK000753	Hs.92374	hypothetical protein	2.6	3.0
	445502	AW379160	Hs.12813	DKFZP434J214 protein	2.6	5.0
	437370	AL359567	Hs.161962	Homo sapiens mRNA; cDNA DKFZp547D023 (fr	2.6	2.9
	444147	AB002306	Hs.10351	KIAA0308 protein	2.6	6.8
	433193	AB040881	Hs.32580	Homo sapiens cDNA FLJ13122 fs, clone NT	2.6	3.2
55	445439	BE243084	Hs.12719	regulator of nonsense transcripts 1	2.6	3.9
	450309	W81348	Hs.4884	KIAA0892 protein	2.6	3.8
	422092	AB007883	Hs.111373	KIAA0423 protein	2.6	2.3
	424118	BE269041	Hs.140452	cargo selection protein (mannose 6 phosp	2.6	5.5
	407818	AW054922	Hs.63478	Homo sapiens cDNA FLJ12366 fs, clone MA	2.6	2.9
60	446493	AK001389	Hs.15144	hypothetical protein DKFZp564O043	2.6	3.2
	442878	AI868648	Hs.22315	ESTs	2.6	4.7
	448771	BE315511	Hs.296244	SNARE protein	2.6	5.0
	416611	AA568308	Hs.192789	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.6	7.7
	409348	AI401535	Hs.146090	ESTs	2.6	3.5
65	439349	AI660898	Hs.185602	ESTs	2.6	3.2
	428433	AA521410	Hs.41371	ESTs	2.6	7.9
	436565	BE547674	Hs.204169	ESTs	2.6	3.0
	438662	AA223599	Hs.6351	cleavage and polyadenylation specific fa	2.6	2.6
	428352	T25833	Hs.200478	ubiquitin-conjugating enzyme E2M (homolo	2.6	2.3
70	459035	AW291109	Hs.208787	ESTs	2.6	2.6
	451814	AA847992	Hs.137003	ESTs	2.6	19.1
	452331	AA598509	Hs.29117	H.sapiens mRNA for pur alpha extended 3'	2.6	2.2
	438461	AW075485	Hs.286049	phosphoserine aminotransferase	2.6	2.1
	424362	AL137646	Hs.146001	Homo sapiens mRNA; cDNA DKFZp586F0824 (f	2.6	4.9
75	423599	H41850	Hs.131846	PCAF associated factor 65 alpha	2.6	3.7
	441226	BE563042	Hs.118820	ESTs	2.6	2.5
	444940	AK002148	Hs.12151	hypothetical protein FLJ11285	2.6	3.4
	448731	AI522273	Hs.42640	ESTs	2.6	3.2
	424250	AF073310	Hs.143648	Insulin receptor substrate 2	2.6	2.5
80	433468	AA832055	Hs.232217	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.6	3.3
	419825	AA159850	Hs.93765	Rpoma HMGIC fusion partner	2.6	4.6
	441384	AW450466	Hs.126830	ESTs	2.6	2.8
	425922	AL157466	Hs.162751	Homo sapiens mRNA; cDNA DKFZp761E2423 (f	2.5	2.7
	434974	AA778711	Hs.4310	eukaryotic translation initiation factor	2.5	2.5

5	408392	U28831	Hs.44566	KIAA1641 protein	2.5	25.4
	432428	AW973152	Hs.31050	ESTs	2.5	10.0
	436623	AI417073	Hs.107265	ESTs	2.5	2.1
	452683	AJ089575	Hs.9071	progesterone membrane binding protein	2.5	2.6
	410582	AW867197	Hs.14562	Homo sapiens cDNA: FLJ21616 fis, clone C	2.5	3.7
10	441328	AJ982794	Hs.159473	ESTs	2.5	9.2
	453983	H94997	Hs.16450	ESTs	2.5	26.1
	438826	R26709	Hs.10095	hypothetical protein from EUROMAGE 1669	2.5	2.3
	427899	AA829286	Hs.181082	serum amyloid A1	2.5	20.3
	427820	BE222494	Hs.180919	inhibitor of DNA binding 2, dominant neg	2.5	3.5
15	458933	AI638429	Hs.24763	RAN binding protein 1	2.5	3.5
	444871	U46386	Hs.12102	sorting nexin 3	2.5	2.3
	411329	AL360265	Hs.63654	hypothetical protein FLJ20552	2.5	2.9
	424074	AI902456	Hs.210761	ESTs	2.5	4.0
	438988	H30039	Hs.107674	ESTs	2.5	2.7
20	412838	AA121384	Hs.191446	ESTs	2.5	5.7
	430189	AI298841	Hs.135133	ESTs, Weakly similar to ORF YNL310c [S.c	2.5	3.0
	432841	M93425	Hs.62	protein tyrosine phosphatase, non-recept	2.5	13.4
	416928	H03109	Hs.108920	HT018 protein	2.5	2.8
	451429	AA525993	Hs.173699	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.5	3.9
25	416388	AI417358	Hs.73677	ESTs	2.5	4.2
	421561	Z45399	Hs.105779	protein inhibitor of activated STAT prot	2.5	7.5
	438480	AJ271643	Hs.87469	putative acid-sensing ion channel	2.5	2.6
	416273	AW575691	Hs.79123	KIAA0084 protein	2.5	2.8
	427149	H94888	Hs.173737	ras-related C3 botulinum toxin substrate	2.5	2.8
30	453041	AI680737	Hs.289068	transcription factor 4	2.5	2.2
	446899	NM_005397	Hs.18426	podocalyxin-like	2.5	4.7
	447301	AW958124	Hs.142442	HP1-BP74	2.5	3.2
	447769	AW873704	Hs.48764	ESTs	2.5	2.4
	447764	AW073310	Hs.163533	Homo sapiens cDNA FLJ14142 fis, clone MA	2.5	2.5
35	427087	BE073913	Hs.173515	uncharacterized hypothalamus protein HT0	2.5	23.6
	440903	AI468079	Hs.126623	ESTs	2.5	2.3
	432353	NM_016558	Hs.274411	SCAN domain-containing 1	2.5	4.1
	408196	AL034548	Hs.43627	SRY (sex determining region Y)-box 22	2.5	2.5
	411373	BE326276	Hs.8861	ESTs	2.5	3.9
40	452402	AI138530	Hs.22216	peroxisome proliferative activated recep	2.5	2.4
	429998	AI458063	Hs.57641	ESTs	2.5	2.6
	421772	Z24958	Hs.108139	zinc finger protein 212	2.5	3.7
	442573	H83366	Hs.7567	Homo sapiens cDNA: FLJ21962 fis, clone H	2.5	2.1
	444677	AL110212	Hs.9242	purine-rich element binding protein B	2.5	3.4
45	441887	AW967865	Hs.92145	ESTs	2.5	3.3
	451031	AI360187	Hs.4254	ESTs	2.5	4.8
	432450	AI990739	Hs.77888	ORF	2.5	2.4
	415860	D56051	Hs.78888	diazepam binding inhibitor (GABA recepto	2.5	4.8
	439630	AA313507	Hs.58633	Homo sapiens cDNA: FLJ22145 fis, clone H	2.4	2.3
50	428607	AB002353	Hs.186840	KIAA0355 gene product	2.4	4.0
	415402	AA164687	Hs.287889	ESTs	2.4	2.5
	446888	AL030998	Hs.16411	hypothetical protein LOC57187	2.4	2.2
	439208	AK000299	Hs.180952	dynactin p52 subunit	2.4	2.4
	452900	AA626794	Hs.250655	prothymosin, alpha (gene sequence 28)	2.4	3.4
55	408657	AA782601	Hs.173328	protein phosphatase 2, regulatory subuni	2.4	3.8
	439143	AI359214	Hs.179260	ESTs	2.4	2.5
	439887	AA847510	Hs.181292	ESTs	2.4	9.3
	408138	AA535740	Hs.301967	Homo sapiens mRNA: cDNA DKFZp434M196 (fr	2.4	5.8
	428386	R17298	Hs.285923	seven in absentia (Drosophila) homolog 1	2.4	4.2
60	417289	D86962	Hs.81875	growth factor receptor-bound protein 10	2.4	2.2
	405268				2.4	3.1
	439734	AC005013	Hs.149	cAMP response element-binding protein CR	2.4	3.6
	445378	AV653564	Hs.226946	ESTs	2.4	2.4
	454085	D82418	Hs.29626	ESTs, Weakly similar to unknown [D.melan	2.4	22.0
65	427354	T57896	Hs.191095	ESTs	2.4	3.6
	452906	BE207039	Hs.75621	serine (or cysteine) proteinase inhibito	2.4	2.2
	450065	AL050107	Hs.301558	DKFZP5861419 protein	2.4	3.6
	451091	AA810932	Hs.131899	ESTs, Weakly similar to coded for by C.	2.4	2.7
	414839	X63692	Hs.77462	DNA (cytosine-5)-methyltransferase 1	2.4	2.6
70	420303	AA258282	Hs.278436	KIAA1474 protein	2.4	2.0
	437068	AA743643	Hs.291427	ESTs	2.4	2.6
	417446	AL118871	Hs.82163	monoamine oxidase B	2.4	4.4
	421454	AI660389	Hs.286108	chorionic somatomammotropin hormone 1 (p	2.4	3.6
	434943	AJ929819	Hs.320	xeroderma pigmentosum, complementation g	2.4	6.4
75	446342	BE295685	Hs.14848	Homo sapiens mRNA: cDNA DKFZp564D016 (fr	2.4	3.0
	452847	AK000857	Hs.30783	hypothetical protein FLJ20850	2.4	2.1
	422506	R20909	Hs.117816	sorcin	2.4	2.2
	405204				2.4	4.3
	419441	AW023731	Hs.274368	Homo sapiens mRNA: cDNA DKFZp5861524 (I	2.4	11.7
80	442293	AW292634	Hs.150358	ESTs	2.4	2.1
	451484	AV648896	Hs.26461	hypothetical protein	2.4	2.0
	438545	AB032977	Hs.6298	KIAA1151 protein	2.4	2.1
	442724	AA355525	Hs.159604	cysteinyl-URNA synthetase	2.4	2.8
	405517				2.4	6.6
80	413822	R08950	Hs.272044	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.4	3.8
	445679	AI343868	Hs.58800	Homo sapiens cDNA FLJ12488 fis, clone NT	2.4	2.3
	408938	BE294925	Hs.46680	CGI-12 protein	2.4	8.1

409142	AL136877	Hs.50758	chromosome-associated polypeptide C	2.4	2.4
422043	AL133649	Hs.110953	Homo sapiens mRNA; cDNA DKFZp434A139 (tr	2.4	2.1
424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	2.4	2.6
442560	AA365042	Hs.228598	ESTs	2.4	4.9
418126	T91451	Hs.86538	ESTs	2.4	11.7
413313	NM_002047	Hs.75280	glycyl-HRNA synthetase	2.4	2.1
415167	AA160784	Hs.26410	ESTs	2.4	4.4
440040	BE219431	Hs.300713	ESTs	2.4	3.4
443935	AF169312	Hs.9613	PPAR(gamma)-angiotensin related protein	2.4	10.7
438977	AA482026	Hs.298625	ESTs	2.4	2.8
452066	AA772149	Hs.16979	ESTs	2.4	5.4
428500	AI815395	Hs.184841	delta-6 fatty acid desaturase	2.4	2.2
408503	AW119059	Hs.63163	ESTs, Weakly similar to UDP-GalNAc:polyp	2.4	2.7
433401	AF039698	Hs.284217	serologically defined colon cancer anti	2.4	4.8
412676	NM_000165	Hs.74471	gap junction protein, alpha 1, 43kD (con	2.4	2.2
453753	BE252883	Hs.35086	ubiquitin specific protease 1	2.4	2.8
424050	AA211218	Hs.138381	farnesyltransferase, CAAX box, alpha	2.4	3.8
440225	BE295782	Hs.159	tumor necrosis factor receptor superfam	2.4	76.7
430512	AF182294	Hs.241578	U8 snRNA-associated Sm-like protein LSM8	2.4	12.3
415156	X84908	Hs.78050	phosphorylase kinase, beta	2.4	10.4
435975	AL118990	Hs.41897	alpha-1-8 glycoprotein	2.4	7.7
429831	AA584489	Hs.137526	ESTs	2.4	4.1
407373	AA031576	Hs.143812	Homo sapiens cDNA FLJ12956 fis, clone NT	2.4	3.3
422221	AA306649	Hs.168213	gb:EST177658 Jurkat T-cells VI Homo sapi	2.4	3.8
451351	AW058261	Hs.158311	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.4	3.3
410082	AA081694	Hs.238927	Musashi (Drosophila) homolog 1	2.4	2.5
430304	AL122071	Hs.25566	Homo sapiens mRNA; cDNA DKFZp434H1235 (f	2.4	6.5
418863	AL135743	Hs.21145	ESTs	2.4	5.2
448414	BE391820	Hs.183779	Homo sapiens cDNA: FLJ22489 fis, clone H	2.4	3.7
428351	AK001701	Hs.159458	Homo sapiens cDNA FLJ10590 fis, clone NT	2.4	6.2
425750	AL050276	Hs.75839	zinc finger protein 288	2.4	5.1
426295	AW367283	Hs.254562	zinc finger protein 6 (CMPX1)	2.4	113.6
408772	W88532	Hs.294084	ESTs	2.4	12.3
426307	F24978	Hs.283681	ESTs	2.4	4.0
405203	AA036755	Hs.252748	ESTs	2.4	2.5
453537	AK000401	Hs.156089	Homo sapiens cDNA FLJ20394 fis, clone KA	2.4	3.6
431427	AI885190	Hs.143851	ESTs, Weakly similar to KIAA1339 protein	2.4	6.2
458021	BE222198	Hs.87627	ESTs	2.4	4.3
453928	AV650630	Hs.111911	disruptor of silencing 10	2.4	2.6
446853	AA281167	Hs.13999	ESTs	2.3	9.7
441628	AW504182	Hs.3337	KIAA0700 protein	2.3	23.0
448138	AA805634	Hs.22862	transmembrane 4 superfamily member 1	2.3	2.2
452568	AW852858	Hs.298033	ESTs	2.3	22.2
417665	AC006488	Hs.104557	Homo sapiens cDNA: FLJ22286 fis, clone H	2.3	8.0
420088	AW579842	Hs.14947	hypothetical protein FLJ10697	2.3	5.1
421456	BE242691	Hs.182828	ESTs	2.3	2.5
412093	U09387	Hs.25010	zinc finger protein 136 (clone pHZ-20)	2.3	31.4
428172	AF212223	Hs.173840	hypothetical protein P15-2	2.3	4.9
450447	AW803849	Hs.249989	HUEL (C4orf1)-interacting protein	2.3	2.3
436001	AI246482	Hs.34401	ESTs	2.3	4.1
414788	AF155660	Hs.30332	mitochondrial solute carrier	2.3	2.1
459284	NM_005110	Hs.14791	glutamine-fructose-6-phosphate transamin	2.3	2.9
452701	AF126245	Hs.29468	acyl-Coenzyme A dehydrogenase family, me	2.3	2.6
448320	AW972832	Hs.239720	ESTs	2.3	3.9
446669	D79338	Hs.301805	CCR4-NOT transcription complex, subunit	2.3	3.8
434618	AI492175	Hs.18542	ESTs	2.3	2.3
452135	AW958157	Hs.184013	ESTs, Highly similar to unnamed protein	2.3	2.8
408596	AL121422	Hs.92381	ESTs	2.3	3.2
436176	AW968058	Hs.55501	nudix (nucleoside diphosphate linked mol	2.3	17.0
419713	W44877	Hs.54982	ESTs	2.3	11.8
414197	AI762154	Hs.73793	Homo sapiens cDNA FLJ14014 fis, clone HE	2.3	4.2
445270	AF022375	Hs.170098	vascular endothelial growth factor	2.3	5.1
412247	AL119528	Hs.82110	KIAA0372 gene product	2.3	4.4
426494	AF063020	Hs.48306	PC4 and SFRS1 interacting protein 1	2.3	2.2
405687	AI084821	Hs.199945	ESTs, Highly similar to EWS_HUMAN RNA-BI	2.3	2.0
417410	AI805366	Hs.94392	ESTs	2.3	3.8
450747	AF184939	Hs.75339	LDL induced EC protein	2.3	6.7
433680	AI358293	Hs.30965	Inositol polyphosphate phosphatase-like	2.3	2.4
420025	AB001451	Hs.94814	neuronal Shc adaptor homolog	2.3	3.1
413407	AI361002	Hs.25204	Homo sapiens cDNA FLJ12168 fis, clone MA	2.3	3.0
452908	AA243088	Hs.3569	chondroitin 4-O-sulfotransferase 2	2.3	2.0
424414	AV60976	Hs.85583	hypothetical protein	2.3	2.4
435791	AI770170	Hs.180402	ESTs	2.3	6.9
457635	AV654019	Hs.62192	Homo sapiens cDNA: FLJ23506 fis, clone L	2.3	2.3
427985	AI707158	Hs.24930	coagulation factor III (thromboplastin,	2.3	4.1
445498	J02931	Hs.2730	tubulin-specific chaperone a	2.3	2.3
410310	AI077158	Hs.21599	heterogeneous nuclear ribonucleoprotein	2.3	3.5
450388	RA4284	Hs.127240	Homo sapiens cDNA FLJ10107 fis, clone HE	2.3	2.8
444514	AL042506	Hs.218329	ESTs	2.3	2.8
448507	BE378418	Hs.130315	hypothetical protein	2.3	2.2
447976	AW793022	Hs.130315	ESTs	2.3	11.5
429767	AA479033	Hs.130315	ESTs	2.3	2.3
408671				2.3	2.3

	448481	W15284	Hs.74832	ESTs	2.3	3.3
	452833	BE559681	Hs.30735	KIAA0124 protein	2.3	2.8
	421057	T58283	Hs.42678	ESTs	2.3	11.0
5	408885	C02741	Hs.48712	hypothetical protein FLJ20735	2.3	4.6
	427615	BE410107	Hs.179817	CGI-82 protein	2.3	2.3
	448861	AL049951	Hs.22370	Homo sapiens mRNA; cDNA DKFZp564O0122 (f	2.3	6.3
	430154	AW583058	Hs.234726	serine (or cysteine) proteinase inhibitor	2.3	34.6
	428494	AA233439	Hs.184634	hypothetical protein FLJ20005	2.3	10.2
10	422987	AW407887	Hs.301772	serine/threonine kinase 11 (Peutz-Jegher	2.3	3.2
	408216	AA741038	Hs.6870	ESTs	2.3	3.3
	407862	BE548267	Hs.50724	Homo sapiens cDNA FLJ10934 fs, clone OV	2.3	5.7
	432215	AU076609	Hs.2834	ribonucleotide reductase M1 polypeptide	2.3	2.1
	410086	AL268405	Hs.13487	Homo sapiens BAC clone RP11-121A8 from 7	2.3	2.2
15	444853	AW576245	Hs.149740	Homo sapiens mRNA for FLJ00028 protein,	2.3	4.5
	413284	AU077055	Hs.289107	baculoviral IAP repeat-containing 2	2.3	4.8
	445547	O86181	Hs.273	galactosylceramidase (Krabbe disease)	2.3	2.5
	420258	AA477514	Hs.96247	transin-associated factor X	2.3	3.5
	437223	C15105	Hs.107884	ESTs	2.3	2.7
20	437353	AA749195	Hs.143748	ESTs	2.3	2.6
	426224	BE085860	Hs.168075	karyopherin (importin) beta 2	2.3	36.1
	402575	Z23024	Hs.138860	Rho GTPase activating protein 1	2.3	3.1
	430712	AW044647	Hs.186284	ESTs	2.3	2.4
25	452036	NM_003968	Hs.27621	sema domain, seven thrombospondin repeat	2.3	2.4
	425180	U00115	Hs.155024	B-cell CLL/lymphoma 6 (zinc finger prote	2.3	4.3
	441848	H05734	Hs.30559	ESTs	2.3	2.1
	424130	AL050136	Hs.140945	Homo sapiens mRNA; cDNA DKFZp586L141 (fr	2.3	2.9
	414682	AL021154	Hs.76884	inhibitor of DNA binding 3, dominant neg	2.3	12.2
	423814	AF105020	Hs.132989	putative protein O-mannosyltransferase	2.3	3.7
30	421841	AL838184	Hs.106334	Homo sapiens clone Z3838 mRNA sequence	2.3	2.3
	427882	AA640987	Hs.193767	ESTs	2.3	10.2
	442159	AW163390	Hs.8123	chromobox homolog 3 (Drosophila HP1 gamm	2.3	4.4
	412541	BE009398	Hs.74002	nuclear receptor coactivator 1	2.3	2.4
	447217	BE485754	Hs.17778	neurotrophin 2	2.3	3.0
35	452338	AA960691	Hs.29147	hypothetical protein FLJ11015	2.3	4.1
	423913	NM_016436	Hs.301055	hepatocellular carcinoma-associated anti	2.3	3.4
	411737	AW160339	Hs.71791	hypothetical protein	2.2	2.0
	412278	BE262621	Hs.73798	macrophage migration inhibitory factor (	2.2	2.4
	456974	M12529	Hs.169401	apolipoprotein E	2.2	2.6
40	416033	NM_012201	Hs.78979	Golgi apparatus protein 1	2.2	10.4
	406739	AU568709	Hs.182426	ribosomal protein S2	2.2	115.3
	448848	AU077149	Hs.21704	transcription factor 12 (HTF4, helix-loop	2.2	4.2
	437371	AK000868	Hs.6570	hypothetical protein FLJ10006	2.2	3.6
	451413	AA448974	Hs.26387	PC3-96 protein	2.2	6.2
45	408665	T88845	Hs.112200	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.2	3.2
	437548	AI701596	Hs.121592	ESTs	2.2	3.0
	452053	AI750575	Hs.173933	nuclear factor I/A	2.2	3.3
	428303	AW974476	Hs.183601	regulator of G-protein signalling 16	2.2	3.4
	441376	H94227	Hs.6592	ESTs, Weakly similar to salivary proline	2.2	2.5
50	413399	BE091833	Hs.22584	gb:IL2-BT0731-260400-076-F04 BT0731 Homo	2.2	2.1
	448913	AA194422	Hs.6456	myosin VI	2.2	2.4
	439053	BE244588	Hs.157313	chaperonin containing TCP1, subunit 2 (b	2.2	3.1
	428065	AI634046	Hs.159629	ESTs	2.2	3.5
	425846	AA102174	Hs.273138	myosin IXB	2.2	7.1
55	426404	AA377607	Hs.128856	ESTs	2.2	3.3
	423464	NM_016240	Hs.5057	CSR1 protein	2.2	2.1
	436135	D85390	Hs.246849	carboxypeptidase D	2.2	9.1
	450478	AL045285	Hs.99936	ESTs, Moderately similar to ALU8_HUMAN A	2.2	2.6
	420788	W93774	Hs.281789	keratin 10 (epidermolytic hyperkeratosis	2.2	2.8
60	433530	BE349534	Hs.5105	ESTs	2.2	2.1
	436297	AI084582	Hs.280668	hypothetical protein FLJ10569	2.2	2.4
	433058	H86865	Hs.191952	Homo sapiens chromosome 19, cosmid R3218	2.2	2.3
	435924	AW029203	Hs.81248	ESTs	2.2	3.2
	417125	AW181998	Hs.394	CUG triplet repeat, RNA-binding protein	2.2	2.3
65	449338	H73444	Hs.6949	adrenomedullin	2.2	18.3
	446065	AA085191	Hs.65403	ESTs, Weakly similar to T2D3_HUMAN TRANS	2.2	3.1
	410668	BE379794	Hs.96918	hypothetical protein	2.2	2.5
	424992	AW290893	Hs.5848	Homo sapiens cDNA: FLJ21581 fs, clone C	2.2	10.8
	437801	AA613866	Hs.73957	Homo sapiens mRNA; cDNA DKFZp584L222 (fr	2.2	2.5
70	412491	W31589	Hs.15020	RABSA, member RAS oncogene family	2.2	2.4
	446392	AF142419	Hs.25042	homolog of mouse quaking QKI (QH domain	2.2	3.4
	450503	R35917	Hs.143696	Homo sapiens mRNA full length insert cDN	2.2	2.8
	432476	T94344	Hs.107153	gb:ye31h10.s1 Stratagene lung (937210) H	2.2	2.6
	424251	AA677466	Hs.49994	coactivator-associated arginine methyltr	2.2	5.0
75	456819	AV647917	Hs.208334	inhibitor of growth family, member 1-lik	2.2	2.6
	433411	AI686666	Hs.79219	ESTs	2.2	2.1
	424714	AI114630	Hs.76549	Homo sapiens cDNA: FLJ21874 fs, clone H	2.2	2.7
	418328	AF186780	Hs.141003	RaiGDS-like gene; KIAA0959 protein	2.2	2.2
	407698	AI697340	Hs.77269	ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha 1 pol	2.2	6.5
80	445939	BE018659	Hs.287420	Homo sapiens cDNA: FLJ21691 fs, clone C	2.2	4.4
	414765	X07854	Hs.181165	guanine nucleotide binding protein (G pr	2.2	6.2
	407138	T64896	Hs.164485	Homo sapiens cDNA FLJ11533 fs, clone HE	2.2	2.8
	453865	AA626250		eukaryotic translation elongation factor	2.2	2.3
	433608	AW340005		ESTs	2.2	2.1

447646	BE619752	Hs.66053	ESTs, Weakly similar to S22126 finger pr	2.2	4.1
433139	AB029826	Hs.47649	3-methylcrotonyl-CoA carboxylase biotin-	2.2	11.7
413433	NM_003199	Hs.289068	transcription factor 4	2.2	2.2
421535	AB002359	Hs.105478	phosphoribosylformylglycinamide synthase	2.2	2.2
428591	BE313029	Hs.185807	Homo sapiens clone 24758 mRNA sequence	2.2	4.8
417248	AA329449	Hs.247302	twisted gastrulation	2.2	2.5
403966				2.2	5.2
437112	AA744692	Hs.166539	ESTs	2.2	3.0
414799	AI752416	Hs.77326	Insulin-like growth factor binding prote	2.2	4.9
431049	AA846576	Hs.103267	hypothetical protein FLJ22548 similar to	2.2	4.4
422100	AI096988	Hs.111554	ADP-ribosylation factor-like 7	2.2	2.5
426543	AV650198	Hs.170311	heterogeneous nuclear ribonucleoprotein	2.2	2.4
423720	AL044191	Hs.23388	Homo sapiens cDNA: FLJ21310 fis, clone C	2.2	4.2
443804	AL135352	Hs.255883	ESTs	2.2	2.2
435080	AI831760	Hs.155111	ESTs	2.2	2.5
452808	AF244135	Hs.30670	hepatocellular carcinoma-associated anti	2.2	7.1
433934	AW273261	Hs.216292	ESTs	2.2	2.1
432004	BE018302	Hs.2894	placental growth factor, vascular endoth	2.2	4.4
452518	AA280722	Hs.24758	ESTs	2.2	3.0
409500	AJ011679	Hs.55099	Homo sapiens mRNA; cDNA DKFZp586D2123 (f	2.2	2.3
448965	AF092134	Hs.22679	CGI-24 protein	2.2	4.0
444954	AW247076	Hs.12163	eukaryotic translation initiation factor	2.2	5.3
458894	AV292171	Hs.23976	scaffold attachment factor B	2.2	2.5
402269				2.2	2.2
423798	AF047033	Hs.301617	Homo sapiens mRNA full length Insert cDN	2.2	4.0
413836	W92003	Hs.70614	ESTs	2.2	3.6
432231	AA339977	Hs.274127	CLST 11240 protein	2.1	2.1
412204	AI125507	Hs.130829	ESTs	2.1	3.0
438807	AA848011	Hs.124570	ESTs, Weakly similar to reverse transcript	2.1	2.2
404170				2.1	41.6
434858	AW979012	Hs.134462	ESTs	2.1	2.2
428982	AA149707	Hs.173091	ubiquitin-like 3	2.1	2.1
421939	BE169531	Hs.109727	TAK1-binding protein 2; KIAA0733 protein	2.1	26.5
442432	BE093569	Hs.38178	Homo sapiens cDNA: FLJ23468 fis, clone H	2.1	3.7
424950	AA602917	Hs.156974	ESTs	2.1	19.9
418123	AA669830	Hs.83530	hypothetical protein	2.1	4.6
404067	AK001519	Hs.7194	CGI-74 protein	2.1	5.3
437092	AA744292	Hs.181244	major histocompatibility complex, class	2.1	3.0
421579	NM_002975	Hs.105927	stem cell growth factor, lymphocyte sear	2.1	3.3
428953	AA306610	Hs.194676	DKFZP434C013 protein	2.1	6.0
457313	AF047002	Hs.241520	transcriptional coactivator	2.1	3.5
420570	AI453665	Hs.290870	ESTs, Weakly similar to S23650 retroviri	2.1	2.1
446918	AL135125	Hs.13913	KIAA1577 protein	2.1	2.3
427567	N24238	Hs.179662	nucleosome assembly protein 1-like 1	2.1	2.8
446383	AL117440	Hs.301867	Homo sapiens mRNA; cDNA DKFZp434M198 (fr	2.1	4.0
428482	AI290352	Hs.184592	KIAA0344 gene product	2.1	2.8
456559	AI336273	Hs.102548	glucocorticoid receptor DNA binding fact	2.1	2.3
442819	BE622721	Hs.301766	ESTs, Weakly similar to hypothetical pro	2.1	27.1
428808	AA436007	Hs.188780	ESTs	2.1	5.0
414893	AA215295	Hs.77578	ubiquitin specific protease 9, X chromos	2.1	15.9
447023	AA356764	Hs.17109	integral membrane protein 2A	2.1	3.0
402250	AV655272	Hs.20252	novel Ras family protein	2.1	4.2
429952	AF080158	Hs.226573	inhibitor of kappa light polypeptide gen	2.1	7.9
420006	H14429	Hs.94300	serologically defined colon cancer anti	2.1	5.6
407316	AA031663	Hs.28802	centaurin-alpha 2 protein	2.1	4.4
417139	M69043	Hs.81328	nuclear factor of kappa light polypeptid	2.1	103.2
414774	X02419	Hs.77274	plasminogen activator, urokinase	2.1	29.9
430488	D19689	Hs.4220	ESTs, Moderately similar to tetracycline	2.1	2.1
428580	U69199	Hs.90259	ESTs, Weakly similar to alpha 1 (Hsapi	2.1	2.5
448501	AA332316	Hs.4273	hypothetical protein FLJ13159	2.1	2.0
422552	N39729	Hs.118243	deoxyribonuclease II, lysosomal	2.1	2.9
419476	AW953030	Hs.59425	Homo sapiens cDNA: FLJ23323 fis, clone H	2.1	3.1
408681	AW953863	Hs.292833	ESTs	2.1	3.9
417353	AA375752	Hs.76362	general transcription factor IIA, 2 (12k	2.1	4.1
442070	AF149785	Hs.111126	pituitary tumor-transforming 1 interact	2.1	4.9
442711	AF161073	Hs.8645	hypothetical protein	2.1	2.2
450139	AK001838	Hs.296323	Homo sapiens cDNA FLJ10978 fis, clone PL	2.1	7.4
452897	BE066058	Hs.269233	ESTs	2.1	4.2
409147	AI889208	Hs.17283	hypothetical protein FLJ10890	2.1	4.5
433028	AI199144	Hs.283737	AD-017 protein	2.1	2.6
407831	BE613377	Hs.15580	Homo sapiens cDNA: FLJ22276 fis, clone H	2.1	8.5
417871	AA521368	Hs.24262	ESTs	2.1	2.9
428754	AI521102	Hs.301374	ESTs, Moderately similar to ALU5_HUMAN A	2.1	5.3
430127	AA219498	Hs.233952	proteasome (prosome, macropain) subunit,	2.1	4.3
442622	NM_000435	Hs.8546	Notch (Drosophila) homolog 3	2.1	8.5
414242	AA749230	Hs.22666	ESTs	2.1	2.8
433323	AA805132	Hs.30701	ESTs	2.1	5.0
439022	AA356589	Hs.173904	ESTs	2.1	6.4
443357	AW016773	Hs.75615	apolipoprotein C-II	2.1	2.0
449103	T24968	Hs.23038	HSPC071 protein	2.1	2.7
427512	AB018322	Hs.179507	KIAA0779 protein	2.1	2.0
426728	NM_007118	Hs.171957	triple functional domain (PTPRF) interact	2.1	2.9
440112	AA095014	Hs.231029	ESTs	2.1	2.3

5	46920	BE397649	Hs.31257	Homo sapiens cDNA FLJ13634 fis, clone PL	2.1	4.8
	428459	D44650	Hs.184411	gene with multiple splice variants near	2.1	2.9
	432842	AW674093	Hs.279525	hypothetical protein PRO2605	2.1	2.3
	438829	AA826926	Hs.204214	ESTs	2.1	2.7
	411442	N25958	Hs.101810	Homo sapiens cDNA FLJ14232 fis, clone NT	2.1	2.2
	409423	AI969783	Hs.43071	ESTs, Weakly similar to AF151900 1 CGI-1	2.1	2.2
	456804	AI421645	Hs.139851	caveolin 2	2.1	15.2
	434536	H14488	Hs.3903	Cdc42 effector protein 4; binder of Rho	2.1	2.8
10	447126	AW150632	Hs.62954	ferritin, heavy polypeptide 1	2.1	25.0
	442328	AI952430	Hs.265237	ESTs	2.1	2.1
	444488	AW192879	Hs.184798	ESTs, Weakly similar to PET2_HUMAN OLIGO	2.1	2.9
	438874	H02780		gb:U41a11.1 Soares placenta NbZHP Homo	2.1	10.6
	412805	AW954569	Hs.296287	ESTs	2.1	4.6
15	446334	U52427	Hs.14839	polymerase (RNA) II (DNA directed) polyp	2.1	2.3
	427201	AB037860	Hs.173933	nuclear factor I/A	2.1	5.1
	436997	AA741151	Hs.137323	ESTs	2.1	3.0
	426369	AF134157	Hs.169487	Kretzler (mouse) maf-related leucine zip	2.1	2.3
	453613	F06838	Hs.14763	ESTs	2.1	2.4
20	413276	Z24725	Hs.75260	myogen inducible 2	2.1	5.5
	422050	AA302741	Hs.25788	ESTs	2.1	4.0
	424797	AA622394	Hs.153177	ribosomal protein S28	2.1	2.1
	437365	AW965771	Hs.91065	hypothetical protein DKFZp761B2423	2.1	3.0
	412482	AI499930	Hs.181043	KIAA0788 protein	2.1	2.7
25	418662	AI801098	Hs.151500	ESTs	2.1	2.1
	404030				2.1	2.1
	437802	AI476996	Hs.122910	ESTs	2.1	3.8
	441130	AI160734	Hs.283429	SMC (mouse) homolog, X chromosome	2.1	3.5
	416084	L16991	Hs.79006	deoxythymidylate kinase (thymidylate kin	2.1	7.4
30	409944	BE297925	Hs.57687	four and a half LIM domains 3	2.1	6.3
	425421	L11669	Hs.157145	tetracycline transporter-like protein	2.1	7.1
	428399	NM_006276	Hs.184167	splicing factor, arginine/serine-rich 7	2.1	2.7
	421313	NM_014923	Hs.103329	KIAA0970 protein	2.1	2.6
	445229	BE276013	Hs.172364	Homo sapiens mRNA for FLJ00088 protein,	2.1	4.7
35	401001				2.1	14.7
	425159	NM_004341	Hs.154868	carbamoyl-phosphate synthetase 2, aspart	2.1	7.2
	438855	AW946278	Hs.6441	tissue inhibitor of metalloproteinase 2	2.1	4.9
	433369	Z49254	Hs.3254	mitochondrial ribosomal protein L23	2.1	25.0
	433228	F28212	Hs.284247	KIAA1491 protein	2.1	5.1
40	445392	AA057478	Hs.23272	ESTs	2.0	2.3
	433891	AA613792		gb:nc97h03.s1 NCL_CGAP_Pr2 Homo sapiens	2.0	2.5
	432572	AI660840	Hs.191202	ESTs, Weakly similar to ALUE_HUMAN III	2.0	2.9
	448474	AI792014	Hs.13809	ESTs	2.0	12.1
	427045	H86504	Hs.173328	protein phosphatase 2, regulatory subun	2.0	2.9
45	444916	AB028958	Hs.12144	KIAA1033 protein	2.0	4.2
	439177	AW820275	Hs.78611	ESTs	2.0	3.3
	423533	NM_014339	Hs.129751	Interleukin 17 receptor	2.0	5.0
	430057	AW450303	Hs.2534	bone morphogenetic protein receptor, typ	2.0	2.3
	424429	U63830	Hs.146847	TRAF family member-associated NFKB activ	2.0	12.7
50	428385	AF112213	Hs.184062	putative Rab5-interacting protein	2.0	4.6
	458946	AA009716	Hs.42311	ESTs	2.0	16.4
	444816	Z48633	Hs.283742	H.sapiens mRNA for retrotransposon	2.0	4.9
	426829	AI761241	Hs.301719	ESTs	2.0	2.4
	433819	AW965275	Hs.284288	hqp0256 protein	2.0	4.4
55	421985	AK001779	Hs.110445	CGI-97 protein	2.0	3.8
	439895	AB037773	Hs.6762	hypothetical protein FLJ10595	2.0	2.2
	449188	AW072939	Hs.23200	myotubularin related protein 1	2.0	2.2
	404820				2.0	2.7
	425811	AL039104	Hs.159557	karyopherin alpha 2 (RAG cohort 1, impor	2.0	2.5
60	422163	AF027208	Hs.297332	Homo sapiens cDNA: FLJ21471 fis, clone C	2.0	3.7
	431172	AI125639	Hs.250666	hairy (Drosophila)-homolog	2.0	10.2
	415200	AL040328	Hs.301912	Homo sapiens cDNA: FLJ22920 fis, clone K	2.0	2.1
	458176	AI961619	Hs.140309	ESTs, Weakly similar to KIAA0681 protein	2.0	5.0
	407895	R44203	Hs.265540	HSPC042 protein	2.0	4.6
65	449818	AI701457	Hs.38694	ESTs	2.0	2.0
	422976	AU076657	Hs.1600	sec61 homolog	2.0	5.7
	430220	BE378277	Hs.152230	ESTs	2.0	11.7
	435448	AA682305	Hs.133268	ESTs	2.0	4.2
	431031	AA830335	Hs.105273	ESTs	2.0	14.1
70	425233	Z17861	Hs.155218	E1B-55kDa-associated protein 5	2.0	5.6
	426458	D83032	Hs.169984	nuclear protein	2.0	5.9
	421965	AA301100		gb:EST14128 Testis tumor Homo sapiens cD	2.0	2.1
	427128	AW301984	Hs.173685	Homo sapiens cDNA FLJ12619 fis, clone NT	2.0	6.3
	449722	BE280074	Hs.23960	cyclin B1	2.0	2.1
75	450816	BE271927	Hs.87385	ESTs	2.0	2.4
	463507	AF083217	Hs.33085	WD repeat domain 3	2.0	13.1
	422801	AF125672	Hs.287994	nuclear receptor co-repressor 2	2.0	3.5
	418178	AA043951	Hs.83715	Sjogren syndrome antigen B (autoantigen	2.0	3.9
	417819	AI253112	Hs.133540	ESTs	2.0	4.0
80	414787	AL049332	Hs.77311	BTG family, member 3	2.0	4.0
	447032	AK000310	Hs.17138	hypothetical protein FLJ20303	2.0	7.0
	431742	NM_016652	Hs.268281	CGI-201 protein	2.0	2.5
	448431	BE613061	Hs.300697	ESTs, Weakly similar to CA13_HUMAN COLLA	2.0	6.5
	456444	AA884517	Hs.31856	ESTs, Weakly similar to KIAA1453 protein	2.0	2.5



5	419178	NM_006284	Hs.89657	TATA box binding protein (TBP)-associate	2.0	6.0
	445437	AW014360	Hs.202119	ESTs, Weakly similar to A46010 X-linked	2.0	2.2
	449910	AJ074585	Hs.58440	ESTs	2.0	2.1
	435963	AF271212	Hs.87627	disrupter of silencing 10	2.0	2.1
	421283	AJ760018	Hs.205071	ESTs	2.0	2.6
	414482	S57498	Hs.76252	endothelin receptor type A	2.0	2.4
	450960	AB013897	Hs.25722	Homo sapiens mRNA for HKR1, partial cds	2.0	2.1
	438644	AI126162	Hs.128037	ESTs	2.0	2.1
10	458343	AJ004775	Hs.205091	ESTs, Weakly similar to WW domain bindin	2.0	6.5
	412574	BE410731	Hs.74050	follicular lymphoma variant translocatio	2.0	12.4
	458079	AJ796870	Hs.54277	ESTs	2.0	3.8
	450582	AJ339732	Hs.13144	HSPC160 protein	2.0	2.8
	409936	AK001691	Hs.57655	hypothetical protein FLJ10829	2.0	3.1
15	426865	D63476	Hs.172813	PAK-interacting exchange factor beta	2.0	3.3
	448430	AA346837	Hs.15075	hypothetical protein DKFZp434E2216	2.0	2.0

Table 4B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

20	Pkey	CAT Number	Accession
	447197	2176805_1	R36075 R36167 AJ366546
	407192	2200202_1	AA602964 AA609200
25	429007	327976_1	AA443145 BF958169 AW904500 AL119015 D80642
	429163	1238297_1	AW974271 AA592975 AA447312 AA884766
	439579	24302_1	AF085400 W73990 W79232
	432060	1235850_1	AA525021 AW971364 AA570759
30	416913	924456_1	AW934714 AW749864 AW749902 BE162498 BE161005 BE162499 BE161006 AA190449 AW513485 BE162500 BE161007
	426413	372468_1	AW954494 AA377823 BG210617 BG195585 BG616269 AJ022688
	433586	32908_1	BC011194 AW517087 AA601054 T85512
	448451	7632_32	AW000978 R33998 AW015994 AI598202 BFB21479 AI521705
	442495	928718_1	AI184717 AW518883 AF121173
35	439568	23928_1	AF086387 W72711 W77884
	407939	600387_1	AW118352 AW196215 W05608
	453740	612139_1	AL120295 BG291384 T88779
	433854	899720_1	BG675161 H59558 AI699484 AA610649 AI937812
	413020	1485885_1	BE048113 R98738 Z42904
40	458050	61684_1	AK057874 AW901391 AW901380 AV730240 T50211 AA828756 AA834708
	440769	21430_5	BG419454 BF924037 R13764 AW793200 BE581793 BG688295 BE270077
	428832	1137866_1	BI008687 AA481363 AA436432 BI008686 AA578229 AA481375
	414473	35761_3	BG392866 BE302693
	422343	786037_1	AW961833 AA309282 AA551780 AI628633 AA551995 AW378461
45	431319	122030_1	BG435498 BG924768 AV718638 AA873350 T82428 T82429 AU185416 AA658442
	422221	319_18	BG910399 BE826714 BF905312 AA306649 Z40822 N76633
	413399	1511159_1	BE091833 BE091874 BE091871
	432476	1237465_1	AW973269 AA548913 T94344 AA834800 AA857492
	438874	52147_1	AF075017 R66779 R22463 H02780
50	433891	647290_1	AW182329 AA613792 T05304 AW858385
	421965	1883_13	BC022394 AJ742351 BE876249 AJ742341 AW572776 AI566256 AI538553 BI837905 AA301100 AA620903 AI142397 AW082310 AI147387 BF509145
			AW968207 AA468415 AU185163 AW450843 AI568752 AW137191

TABLE 4C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

60	Pkey	Ref	Strand	NL_position
	400859	9757499	Minus	91888-92018,98131-98294,99474-99570
	405238	7249119	Minus	51728-51836
	400992	8096828	Plus	140390-140822
65	400860	9757499	Minus	151830-152104,152849-152744
	402524	9798518	Minus	20529-21098
	404210	6006248	Plus	169926-170121
	402604	9909420	Plus	20393-20767
	402855	8662953	Minus	59763-69909
70	404029	7671252	Plus	108716-111112
	402605	9909420	Minus	47680-47973
	404049	3688074	Minus	75785-78155
	403549	8081691	Minus	137150-137362
	404048	3688074	Minus	54421-56808
75	404171	9930793	Plus	173667-173783,176876-177055
	405649	4926908	Minus	50032-50132,50524-50764
	405268	4156151	Minus	24404-24521
	405204	7230116	Plus	126569-126754
	405517	9454624	Plus	114767-114877
80	405203	7230116	Plus	125295-125463
	405687	6249668	Minus	54787-54891,55844-55917
	403968	8568881	Plus	158193-158277,160116-160290
	402269	3128158	Minus	1188-1324,5492-5611,23445-23851
	404170	9930793	Plus	168836-169248

404030	7671252	Plus	149362-151749
401001	7229886	Minus	113631-113762
404820	4678240	Plus	20475-21085

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TABLE 5A: ABOUT 43 GENES UPREGULATED IN GLIOBLASTOMA THAT ENCODE PREDICTED MEMBRANE PROTEINS

Pkey:	Unique Eos probeset identifier number				
ExAccn:	Exemplar Accession number, Genbank accession number				
UnigeneID:	Unigene number				
Unigene Title:	Unigene gene title				
R1:	Ratio of brain tumor to body atlas				
R2:	Ratio of brain tumor to normal brain				
Pkey	ExAccn	UnigeneID	Unigene title	R1	R2
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	72.0	11.3
447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	64.2	7.1
451099	R52795	Hs.25954	Interleukin 13 receptor, alpha 2	22.0	7.6
415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	21.2	3.0
412986	X81120	Hs.75110	cannabinoid receptor 1 (brain)	18.6	18.6
417355	D13168	Hs.82002	endothelin receptor type B	16.4	16.4
419721	NM_001650	Hs.288550	aquaporin 4	16.2	4.4
452355	N54926	Hs.29202	G protein-coupled receptor 34	13.9	13.9
410227	AB009284	Hs.61152	exostosins (multiple)-like 2	11.9	2.9
419723	AL120193	Hs.92614	Homo sapiens growth differentiation factor	7.4	3.5
414825	X06370	Hs.77432	epidermal growth factor receptor (avian)	6.9	6.4
438998	AW804296	Hs.9950	Sec61 gamma	4.8	7.2
422033	AW245805	Hs.110903	claudin 5 (transmembrane protein deleted)	4.3	6.1
414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	4.2	34.8
431556	AF016028	Hs.260039	sarcomas (Kras oncogene-associated gene)	4.0	3.8
435869	AF255910	Hs.54650	vascular endothelial junction-associated	3.7	4.2
440616	S42303	Hs.161	cadherin 2, type 1, N-cadherin (neuronal)	3.5	6.1
428141	D50402	Hs.182611	solute carrier family 11 (proton-coupled)	3.5	2.4
428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino)	3.4	2.8
431053	S40369	Hs.249141	Glutamate receptor subunit	3.3	2.4
445070	NM_000677	Hs.258	adenosine A3 receptor	3.2	7.6
430890	X54232	Hs.2699	glypican 1	3.2	4.3
423422	AC005175	Hs.128425	NY-REN-24 antigen	3.2	4.0
413387	NM_006517	Hs.75317	solute carrier family 16 (monocarboxylic)	3.1	2.6
447471	AF039843	Hs.18676	sprouty (Drosophila) homolog 2	3.0	4.1
427150	BE616183	Hs.173737	ras-related C3 botulinum toxin substrate	3.0	4.1
422676	D28481	Hs.1570	histamine receptor H1	3.0	2.1
430293	AJ416988	Hs.238272	inositol 1,4,5-triphosphate receptor, ly	3.0	6.3
453498	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	2.8	7.4
428281	AA194554	Hs.183434	ATPase, H <sup>+</sup> transporting, lysosomal (vacu	2.7	3.2
417446	AL118671	Hs.82163	monamine oxidase B	2.4	4.4
412676	NM_000165	Hs.74471	gap junction protein, alpha 1, 43kD (con	2.4	2.2
440225	BE295782	Hs.159	tumor necrosis factor receptor superfamily	2.4	76.7
450447	AF212223	Hs.25010	hypothetical protein P15-2	2.3	2.3
410310	J02931	Hs.62182	coagulation factor III (thromboplastin,	2.3	4.1
452036	NM_003966	Hs.27621	sema domain, seven thrombospondin repeat	2.3	2.4
447217	BE465754	Hs.17778	neuroplatin 2	2.3	3.0
447023	AA356764	Hs.17109	Integral membrane protein 2A	2.1	3.0
422070	AF149785	Hs.111126	pituitary tumor-transforming 1 interacti	2.1	4.9
456804	AJ421645	Hs.139851	caveolin 2	2.1	15.2
430057	AW450303	Hs.2534	bone morphogenetic protein receptor, typ	2.0	2.3
422163	AF027208	Hs.297332	Homo sapiens cDNA: FLJ21471 fls, clone C	2.0	3.7
414482	S57498	Hs.76252	endothelin receptor type A	2.0	2.4

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TABLE 6A: ABOUT 397 GENES DOWNREGULATED IN GLIOBLASTOMA

Pkey:	Unique Eos probeset identifier number				
ExAccn:	Exemplar Accession number, Genbank accession number				
UnigeneID:	Unigene number				
Unigene Title:	Unigene gene title				
R1:	Ratio of normal brain to body atlas				
R2:	Ratio of normal brain to brain tumor				
Pkey	Ex Accn	UnigeneID	Title	R1	R2
439340	AB032436	Hs.6535	brain-specific Na-dependent inorganic ph	4.47	77.82
424846	AU077324	Hs.1832	neuropeptide Y	4.49	59.32
428874	W32133	Hs.194356	transferrin (prealbumin, amyloidosis t	7.06	45.64
416838	D64745	Hs.80247	cholecystokinin	9.45	44.59
401412	c14p3_2958		exon	3.20	32.56
451835	T63643	Hs.209715	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.21	28.93
412768	AW996044	Hs.26239	ESTs	3.16	28.12
415448	T68645	Hs.952	solute carrier family 10 (sodium/bile ac	3.27	27.04
411305	BE241596	Hs.69547	myelin basic protein	13.80	25.92
438054	AA776626	Hs.62183	ESTs	3.59	25.06
410837	BE145698		gbl:LO-HT0205-231199-145-a07 HT0205 Homo	3.05	24.43
425121	AJ797511	Hs.154679	synaptobagmin 1	6.82	23.67
456763	AJ271351	Hs.128180	B-cell translocation gene 4	3.29	23.32
429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	8.03	22.56
451892	AI821302	Hs.167834	ESTs	4.12	21.82

424922	BE386547	Hs.217112	ESTs, Weakly similar to Similarity to Ye	4.41	21.28
411666	AF106584	Hs.71346	neurofilament 3 (150kD medium)	5.27	21.20
432247	AA531287	Hs.105805	ESTs	3.25	21.14
436812	AW298067		gb:U1-H-BWD-ajp-g-09-0-ULs1 NCI_CGAP_Su	3.02	21.12
422234	AF119818	Hs.113287	discs, large (Drosophila) homolog-associ	3.38	20.50
435708	AJ362949	Hs.75169	ESTs	8.79	20.45
423135	N67655	Hs.28411	ESTs	6.82	20.28
440600	AI807691	Hs.126351	ESTs	3.58	20.09
405230	cNp1_7656		exon	3.31	19.95
456915	N55540	Hs.78026	ESTs, Weakly similar to similar to ankyr	3.14	19.40
425130	AA448208	Hs.99163	ESTs	3.53	19.20
416812	H91010	Hs.44940	ESTs	3.54	19.08
454171	AW854832		gb:QV2-CT0261-201099-011-405 CT0281 Homo	3.78	19.04
457463	AW877031	Hs.272321	Homo sapiens cDNA FLJ12571 fis, clone NT	3.13	18.91
454589	AW809699		gb:MR4-ST0124-2411199-028-e12 ST0124 Homo	4.10	18.60
418104	T05726	Hs.177130	ESTs	3.17	18.41
416357	T82050	Hs.268907	ESTs	3.11	18.13
414683	S78296	Hs.76888	Interaxin neuronal intermediate filamen	5.65	18.13
447694	AI420083	Hs.170303	ESTs	3.56	17.79
427627	R87582	Hs.179915	guanine nucleotide binding protein (G pr	4.63	17.65
428010	AA806554	Hs.185375	ESTs	3.03	17.40
417159	R01761		gb:ye81f10.s1 Soares fetal liver spleen	3.23	17.38
438788	AA766908	Hs.259047	ESTs	3.16	17.21
459349	AW749381		gb:QV3-BT0381-170100-060-c02 BT0381 Homo	3.26	17.10
450214	BE439763	Hs.227571	regulator of G-protein signalling 4	3.66	17.04
438068	AI927209	Hs.283089	HMT1 (hnRNP methyltransferase, S. cerevi	3.54	16.48
437268	AI754847	Hs.227571	regulator of G-protein signalling 4	5.63	16.92
435315	AA700240	Hs.165402	ESTs	4.06	16.12
424240	AB023185	Hs.143535	calcium/calmodulin-dependent protein kin	4.69	15.92
412448	AJ768015	Hs.92127	ESTs	6.44	15.75
449714	AB033015	Hs.23941	KIAA1189 protein	4.59	15.43
435832	AA425688	Hs.41641	Bruno (Drosophila) -like 4, RNA binding	4.63	14.97
437397	AA349847	Hs.4221	hypothetical protein DKFZp761H039	5.93	14.81
435502	L13266	Hs.105	glutamate receptor, ionotropic, N-methyl	3.29	14.61
414187	BE312141		gb:60114596ZF1 NIH_MGC_19 Homo sapiens c	3.37	14.46
417868	AJ078534	Hs.122592	ESTs	7.57	14.22
428536	AJ143139	Hs.2288	vslin-like 1	5.16	13.98
402125	c18p3_155		exon	3.11	13.94
440503	NM_006539	Hs.7235	calcium channel, voltage-dependent, gamma	3.49	13.92
418090	T85201	Hs.188468	ESTs	3.25	13.79
437665	AA765417	Hs.292053	ESTs	3.07	13.79
457113	AJ734016	Hs.270508	ESTs	3.50	13.69
424933	AW999974	Hs.5181	proliferation-associated 2G4, 38kD	3.59	13.48
443489	AJ073512	Hs.133916	ESTs	3.24	13.20
404289	c6p3_5821		exon	3.99	13.12
406534	ph2_4616		exon	3.89	13.10
423280	AA324037		gb:EST26901 Cerebellum II Homo sapiens c	3.38	13.03
455421	AW937681	Hs.288324	Homo sapiens cDNA FLJ13283 fis, clone OV	3.04	12.93
433725	AF063559	Hs.283919	Homo sapiens clone HQ0117 PRO0117 mRNA,	3.71	12.85
416660	R98905	Hs.35992	ESTs	3.92	12.74
407593	AW044083	Hs.237008	ESTs	3.85	12.67
451734	NM_006176	Hs.26944	neurogranin (protein kinase C substrate,	7.41	12.59
410366	AJ267589	Hs.25214	hypothetical protein	7.89	12.50
405349	cNp3_13716		exon	3.45	12.42
442338	AJ761976	Hs.156080	ESTs	3.69	12.35
424458	M29273	Hs.1780	myelin associated glycoprotein	4.72	12.31
431400	AA504607		gb:aa63a02.s1 NCI_CGAP_GCB1 Homo sapiens	3.42	12.29
417764	R13027	Hs.266703	ESTs	3.35	12.18
440184	AB002297	Hs.7022	dedicator of cyto-kinesis 3	6.15	12.11
431339	AA506294	Hs.257268	ESTs	3.50	11.97
452265	BE501516	Hs.114772	ESTs	3.82	11.96
419297	AA446040	Hs.98640	Homo sapiens cDNA: FLJ21089 fis, clone C	3.16	11.86
424991	AA775471	Hs.241467	ESTs	3.03	11.64
431988	AC002302	Hs.77202	protein kinase C, beta 1	3.78	11.82
450987	AA017202	Hs.32794	ESTs	3.28	11.61
440607	AA894559	Hs.192097	ESTs	3.11	11.60
454566	AW807605		gb:MR4-ST0098-120100-001-b06 ST0098 Homo	3.26	11.54
442000	H38671	Hs.8071	KIAA0735 gene product; synaptic vesicle	3.44	11.51
437948	AA772920		gb:ae73c09.s1 Stratagene schizo brain 81	3.18	11.46
401081	c11p3_921		exon	3.18	11.35
438919	AW979114		gb:EST391224 MAGE resequences, MAGP Homo	4.16	11.35
454578	AW809178		gb:MR4-ST0118-261099-012-c07 ST0118 Homo	3.02	11.27
422279	H89644	Hs.114231	C-type lectin-like receptor-2	3.35	11.13
453101	AW952776	Hs.94943	ESTs	3.21	11.07
455836	BE145795		gb:MR0-HT0208-101299-103-s12 HT0208 Homo	3.81	10.83
413324	V00571	Hs.75294	corticotropin releasing hormone	3.72	10.71
412268	N59006	Hs.28133	ESTs	3.80	10.60
436887	AW953157	Hs.193235	ESTs	7.24	10.56
454968	AW849046		gb:IL3-CT0214-150300-085-H08 CT0214 Homo	3.05	10.53
418162	T11958		gb:AB02R Heart Homo sapiens cDNA clone A	3.07	10.50
425637	AB007913	Hs.158291	KIAA0444 protein	3.07	10.48
436230	AJ248723	Hs.17711	ESTs	3.09	10.45
431169	AW971240		gb:EST383329 MAGE resequences, MAGL Homo	3.02	10.43

5	447359	NM_012093	Hs.18268	adenylate kinase 5	5.91	10.40
	457187	AA443927	Hs.144360	EST	3.30	10.39
	407539	X91103		gb:HLsapiens mRNA for Hr44 protein.	3.02	10.35
	452855	R17748	Hs.84469	ESTs	3.02	10.26
	440352	AI692322	Hs.65373	ESTs	3.03	10.20
	456116	Z28528	Hs.172004	ESTs	3.11	10.17
	458172	BE007237		gb:PMO-BN0139-050500-003-g09 BN0139 Homo	3.32	10.14
	445881	AI263029	Hs.210689	ESTs	3.04	10.11
10	454059	NM_003154	Hs.37048	statherin	3.27	9.97
	402624	c1p1_2660		exon	3.05	9.94
	441539	AA937200	Hs.192939	ESTs	3.27	9.82
	412172	N76794		gb:yv45g07.r1 Soares fetal liver spleen	3.03	9.78
	427942	AA417858		gb:zv1d05.r1 NCL_CGAP_GCB1 Homo sapiens	4.09	9.73
15	436887	BE041837	Hs.120316	ESTs	3.25	9.73
	454688	AW814472		gb:MR3-ST0203-010200-109-b06 ST0203 Homo	3.41	9.73
	446122	AI362790	Hs.181801	ESTs	3.40	9.71
	420480	AL137381	Hs.98173	hypothetical protein	3.03	9.56
	433447	U29195	Hs.3281	neuronal pentadactin II	3.72	9.54
20	407178	AA195651	Hs.104106	ESTs	3.89	9.47
	415814	F12926	Hs.165998	DKFZP564M2423 protein	3.06	9.45
	450618	BE245175	Hs.270893	ESTs	3.99	9.39
	455675	BE055984		gb:RC3-BT0319-120200-014-e06 BT0319 Homo	3.45	9.32
	456459	AA253074	Hs.146261	ESTs	4.08	9.30
25	423420	AI571364	Hs.128382	Homo sapiens mRNA; cDNA DKFZp76111224 (f	6.18	9.23
	455844	BE064521		gb:RC4-BT0311-250200-014-d02 BT0311 Homo	3.02	9.20
	419800	AA282392	Hs.191525	ESTs	3.28	9.16
	430864	Y10929	Hs.248167	zinc finger protein 186 (Krueppel type)	3.04	9.00
	409716	AL117454	Hs.56027	Homo sapiens mRNA; cDNA DKFZp586J1717 (f	3.02	9.00
30	412962	AW839578	Hs.18160	Homo sapiens cDNA FLJ11550 fis, clone HE	3.33	8.99
	445040	AW444834	Hs.195929	ESTs, Weakly similar to pre-serum amyloid	3.50	8.96
	451496	AW503407		gb:UH-HF-BNO-akw-d-11-0-UI.r1 NIH_MGC_50	3.17	8.94
	424617	AA344151		gb:EST50059 Gall bladder I Homo sapiens	3.25	8.91
	441914	AA971496	Hs.128465	ESTs	3.42	8.88
35	405320	cNp3_12168		exon	3.30	8.84
	449179	AI633785	Hs.196561	ESTs	3.43	8.84
	400335	Y13187	Hs.248066	Homo sapiens dmd gene, intron 11	3.13	8.78
	454962	AW847645		gb:IL3-CT0213-280100-056-A04 CT0213 Homo	4.16	8.74
40	407803	AW061681	Hs.269064	ESTs	3.09	8.73
	455260	AW878317		gb:MR3-OT0007-250300-206-e09 OT0007 Homo	3.78	8.70
	431096	AA324358	Hs.249227	Homo sapiens DNA, cosmid clones TN82 and	4.01	8.67
	424481	R19453	Hs.1787	proteolipid protein (Pelizaeus-Merzbache	8.12	8.63
	407616	AW054849	Hs.246831	ESTs, Weakly similar to CIKG_HUMAN VOLTA	3.08	8.53
	434589	AF147363		gb:Homo sapiens full length insert cDNA	3.26	8.51
45	439239	AI031540	Hs.235331	ESTs	5.78	8.48
	410926	AW810708		gb:MR2-ST0129-051099-007-g07 ST0129 Homo	3.34	8.47
	430004	U27768	Hs.227571	regulator of G-protein signalling 4	4.28	8.45
	409623	AW449185		gb:UH-H-B13-akg-e-05-0-ULs1 NCL_CGAP_Su	3.32	8.43
50	420156	AW449258	Hs.6187	ESTs	3.40	8.38
	411555	AF113537	Hs.70669	HMP19 protein	5.85	8.34
	408509	AA497035	Hs.110502	ESTs	3.17	8.34
	442368	AI698577	Hs.202481	ESTs	3.02	8.33
	457870	AA732217	Hs.294054	ESTs	3.04	8.32
	437254	AA831258		gb:oc73R04.s1 NCL_CGAP_GCB1 Homo sapiens	3.35	8.24
55	415508	R39236		gb:yc91d03.s1 Soares infant brain 1N1B H	3.07	8.22
	409483	U49379	Hs.54508	diacylglycerol kinase, epsilon (84kD)	3.31	8.20
	435229	AA676556	Hs.269515	ESTs, Moderately similar to ALUB_HUMAN I	3.21	8.19
	458120	W21388	Hs.54523	ESTs, Weakly similar to cytochrome P-450	3.22	8.17
	444613	H28627	Hs.79092	ESTs	3.78	8.16
60	417050	N39540	Hs.108029	ESTs	4.06	8.14
	425607	U09860	Hs.158333	protease, sarfina, 7 (enterokinase)	3.68	8.06
	413263	BE076131		gb:PM1-BT0585-110200-003-g03 BT0585 Homo	3.40	8.04
	424549	AI873205	Hs.183114	Homo sapiens cDNA FLJ14238 fis, clone NT	3.27	8.03
	452689	F33868	Hs.284176	transferrin	3.03	8.01
65	405476	cNp3_19940		exon	3.28	8.00
	403932	c5p1_533		exon	3.58	7.99
	407095	AF011757	Hs.105937	RAGE binding protein	3.32	7.96
	415987	H11124		gb:ym14h07.s1 Soares infant brain 1N1B H	3.10	7.96
	417555	H65366		gb:yv67c10.r1 Soares fetal liver spleen	3.05	7.95
70	448985	AA324885	Hs.22777	carbonic anhydrase XI	5.30	7.79
	428689	NM_014351	Hs.189810	sulfotransferase-related protein	3.87	7.74
	424140	Z48051	Hs.141308	myelin oligodendrocyte glycoprotein	4.68	7.74
	441099	AW339393	Hs.126573	ESTs	3.08	7.74
	448589	AF017090	Hs.21554	KIAA1107 protein	3.10	7.73
75	408112	ph0_24243		exon	3.22	7.70
	458439	AV647220	Hs.282889	ESTs, Weakly similar to strong similarit	3.22	7.69
	429859	NM_007050	Hs.225952	protein tyrosine phosphatase, receptor t	3.15	7.68
	412090	AW955826	Hs.12398	ESTs, Weakly similar to ALUB_HUMAN ALU S	3.01	7.67
	413547	BE147440		gb:RC1-HT0229-080100-015-R09 HT0229 Homo	3.01	7.66
	447772	AI924558	Hs.161399	ESTs	3.04	7.63
80	411132	AW819191		gb:CM1-ST0283-071299-061-d08 ST0283 Homo	3.72	7.61
	425490	NM_002248	Hs.158173	potassium intermediate/small conductance	3.15	7.60
	454568	BE141434		gb:MR0-HT0079-051099-002-d01 HT0079 Homo	3.16	7.59
	439099	AB037800	Hs.6462	KIAA1378 protein	3.40	7.57

	415669	NM_005025	Hs.78589	serine (or cysteine) proteinase inhibitor	6.71	7.57
	428175	AI810774	Hs.98376	ESTs	3.04	7.55
	413162	BE068115		gb:CM1-BT0368-051299-060-g07 BT0368 Homo	3.43	7.54
	451361	AA053854	Hs.235390	Homo sapiens mRNA; cDNA DKFZp761B101 (fr	3.11	7.53
5	442527	AF150289	Hs.205436	ESTs	3.31	7.53
	450407	NM_000810	Hs.24969	gamma-aminobutyric acid (GABA) A recepto	5.24	7.53
	456965	AI589569	Hs.190082	ESTs	3.13	7.47
	441799	AW292276	Hs.127872	ESTs	3.38	7.41
10	424185	AA279752	Hs.142570	Homo sapiens clone 24628 mRNA sequence	3.16	7.40
	429783	AA811987	Hs.125779	ESTs	3.13	7.38
	429268	AA205386	Hs.198481	RAR-related orphan receptor B	3.48	7.38
	400708	c11p1_1292		exon	3.33	7.35
	402598	BE314624	Hs.3128	polymerase (RNA) II (DNA directed) polyp	3.04	7.33
15	455377	AW905347		gb:QV2-NN1073-220400-159-008 NN1073 Homo	3.03	7.33
	435070	AI821270	Hs.116930	ESTs	3.03	7.33
	405427	cNp3_17682		exon	3.03	7.25
	456149	AW861879		gb:CM0-CT0341-260100-160-h12 CT0341 Homo	3.56	7.24
	402816	c1p3_2531		exon	3.13	7.21
20	422890	Z43784	Hs.78713	solute carrier family 25 (mitochondrial	3.40	7.15
	422297	AW961290	Hs.155615	ESTs	3.44	7.10
	412686	AW984068		gb:RC0-HN0006-160300-011-e06 HN0006 Homo	3.91	7.09
	435383	BE065178		gb:RC1-BT0314-020200-012-h01 BT0314 Homo	3.09	7.09
	412290	BE069037		gb:QV3-BT0379-161259-040-e12 BT0379 Homo	3.04	7.08
25	415486	H12214	Hs.13284	ESTs	4.22	7.07
	407728	AW071502	Hs.175931	ESTs	3.05	7.06
	448548	R13209	Hs.21413	solute carrier family 12, (potassium-chl	5.93	7.05
	417275	X63578	Hs.81849	parvalbumin	4.08	7.04
	418425	AI871247	Hs.6262	ESTs	4.10	7.04
30	440568	AA889574	Hs.177511	ESTs	3.28	7.04
	411427	AW846080		gb:MR3-CT0176-081099-002-b09 CT0176 Homo	3.11	7.03
	422272	AI452421	Hs.77965	Cdk-associating RS-cyclophilin	3.39	7.03
	410816	AW806175		gb:MR1-UM0108-130400-003-a06 UM0108 Homo	3.30	7.02
	418375	NM_003081	Hs.84369	synaptosomal-associated protein, 25kD	9.93	7.01
35	421627	AI138551	Hs.97318	ESTs	3.10	7.01
	447258	BE047911		gb:z44a05.y1 NCL_CGAP_Bm52 Homo sapien	3.09	6.99
	455547	AW994078		gb:RC3-BN0036-090200-011-h02 BN0036 Homo	3.35	6.98
	432209	AW971278		gb:EST383357 MAGE resequences, MAGL Homo	3.49	6.92
	404541	c8p1_6409		exon	4.62	6.89
40	451539	AA059467	Hs.218933	ESTs	3.01	6.88
	429954	AI918130	Hs.21374	ESTs	3.82	6.87
	411138	AW819500		gb:RC5-ST0293-180100-012-C07 ST0293 Homo	3.08	6.87
	447464	AW444957	Hs.201897	ESTs, Weakly similar to ALU4_HUMAN ALU S	3.33	6.85
	454713	AW815111		gb:QV4-ST0212-091199-023-c09 ST0212 Homo	3.16	6.84
45	415734	NM_014747	Hs.78748	KIAA0237 gene product	5.00	6.84
	429667	AA456275	Hs.44841	ESTs	3.09	6.80
	403008	c21p3_2374		exon	3.04	6.78
	448079	T56522	Hs.154030	ESTs	3.11	6.75
	441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	4.49	6.75
50	437804	AA828257	Hs.124324	ESTs	3.42	6.73
	436454	AA757615	Hs.291509	ESTs	3.01	6.72
	416334	H53139	Hs.38271	ESTs	3.12	6.70
	455965	BE167014		gb:CM2-HT0502-140200-088-d08 HT0502 Homo	3.05	6.68
	445085	AI569295	Hs.179285	ESTs	3.19	6.68
55	445811	AW418497	Hs.145583	ESTs	3.61	6.68
	437782	T78028	Hs.154679	synaptotagmin 1	7.21	6.68
	416268	H49111		gb:yo21c07.r1 Soares adult brain N2b5H85	3.02	6.67
	449768	AI688890	Hs.54773	ESTs	3.25	6.64
	443100	AI033188		gb:ow94e08.s1 Soares fetal_liver_spleen_	3.07	6.64
60	408070	AW148852		gb:df05d05.x1 NCL_CGAP_Bm35 Homo sapien	3.12	6.60
	451602	AW008846	Hs.60857	ESTs	3.05	6.59
	441447	AA934077	Hs.126980	ESTs	4.06	6.59
	445078	AI869975	Hs.4775	Junctophilin 3	4.25	6.59
	434501	AF143878	Hs.194152	Homo sapiens clone IMAGE:115304 mRNA seq	3.25	6.58
65	415960	R49020	Hs.24974	ESTs	3.34	6.58
	403395	c3p1_11541		exon	3.59	6.57
	403061	c2p1_10450		exon	3.06	6.56
	419232	AI382037	Hs.87421	ESTs	3.28	6.56
	425984	AW836277	Hs.165636	hypothetical protein DKFZp761C07121	6.50	6.56
70	403717	c4p1_3133		exon	3.52	6.53
	452178	AW043576	Hs.171929	ESTs	3.38	6.53
	455758	R15709	Hs.284231	Novel human gene mapping to chromosome 22	4.42	6.52
	433858	N69243	Hs.192974	Homo sapiens cDNA FLJ12735 fis, clone NT	3.58	6.52
	425440	AA357518		gb:EST65256 LNCAP cells 1 Homo sapiens c	3.15	6.49
75	419412	AW161058	Hs.90297	synuclein, beta	5.60	6.47
	423678	AW963357	Hs.7847	ESTs	3.47	6.47
	416625	R97839	Hs.35758	ESTs	3.10	6.46
	451854	T92536	Hs.194096	ESTs	3.28	6.45
	406732	AA487229	Hs.2064	vimentin	3.71	6.44
80	434619	H43163	Hs.32810	ESTs	3.05	6.44
	413797	BE167274	Hs.5996	ESTs	3.23	6.44
	438612	AW977980	Hs.292129	ESTs	3.39	6.42
	412317	AW991979		gb:RC1-BN0014-210100-012-R05 BN0014 Homo	3.46	6.42
	422159	N76787	Hs.153408	ESTs	3.03	6.41

	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	3.46	6.35
	427334	R44789	Hs.119486	ESTs, Weakly similar to transmembrane re	3.93	6.35
	453839	AL138417		gb:DKFZp434B1729_r1 434 (synonym: htes3)	3.06	6.34
5	429096	AB011106	Hs.196012	KIAA0534 protein	3.12	6.33
	444509	AW571659	Hs.278081	ESTs	3.30	6.33
	419515	S81944	Hs.90791	gamma-aminobutyric acid (GABA) A recepto	3.11	6.33
	418900	BE207357	Hs.301709	ESTs	3.14	6.30
	437979	AA774318	Hs.121708	ESTs	3.25	6.29
10	410359	R38624	Hs.108313	ESTs	4.74	6.28
	415990	R76929	Hs.29633	ESTs	3.39	6.28
	419392	W28573		gb:51f10 Human retina cDNA randomly prim	3.00	6.28
	424312	AB013452	Hs.144931	ATPase, aminophospholipid transporter (A	3.06	6.26
	444782	AI733700	Hs.143883	ESTs	3.09	6.25
15	447785	AL041765	Hs.161423	ESTs	3.05	6.22
	418189	AA884555	Hs.86603	ESTs	3.55	6.22
	440582	AA993337	Hs.129082	ESTs	3.73	6.21
	457766	AL119470	Hs.145631	ESTs	3.69	6.21
	426814	AF036943	Hs.172619	KIAA1106 protein	4.71	6.21
20	412018	BE148152		gb:RC4-HT0231-041199-012-b04 HT0231 Homo	3.36	6.21
	414699	AI815523	Hs.76930	synuclein, alpha (non A4 component of am	3.68	6.19
	420127	AA360399	Hs.44811	ESTs	3.54	6.18
	418833	AW974899	Hs.292776	ESTs	3.08	6.18
	441265	AA927180	Hs.153261	ESTs	3.21	6.17
25	413408	R51793	Hs.21745	ESTs	3.56	6.15
	434512	AW139932	Hs.188941	ESTs	3.56	6.15
	422253	W81526	Hs.118329	ESTs	6.04	6.10
	439950	AW937417	Hs.293561	ESTs	3.24	6.10
	417210	N99228	Hs.49162	ESTs	3.54	6.10
30	414306	BE272198	Hs.283869	Human DNA sequence from clone RP5-1013A2	3.35	6.10
	411265	AW834695		gb:RC0-LT0001-261199-031-D05 LT0001 Homo	3.07	6.10
	412734	AW583498		gb:RC2-BN0033-170300-019-b08 BN0033 Homo	3.36	6.09
	425172	AA447729	Hs.12714	ESTs	6.40	6.06
	451759	W23161	Hs.32886	ESTs	3.21	6.02
35	432154	AI701523	Hs.112577	ESTs	3.50	6.02
	401313	c13p1_435		exon	3.92	5.96
	448951	AI350575	Hs.156730	ESTs	3.20	5.95
	440917	AA909651	Hs.160025	ESTs	3.06	5.94
	405961	ph0_14521		exon	3.12	5.91
40	428737	AA984728	Hs.192760	kinesin family member 5A	3.05	5.90
	417292	N69187	Hs.191361	ESTs	3.62	5.89
	448681	AL109781	Hs.21754	Homo sapiens mRNA full length insert cDN	3.52	5.88
	452524	AW136499	Hs.29796	Homo sapiens mRNA; cDNA DKFZp434D1319 (f	3.07	5.88
	426575	M74826	Hs.170808	glutamate decarboxylase 2 (pancreatic is	4.08	5.87
45	423641	AL137256	Hs.130489	Homo sapiens mRNA; cDNA DKFZp781K0912 (f	3.28	5.87
	420755	AI699437	Hs.165268	ESTs	3.17	5.86
	448116	AW352276	Hs.170700	ESTs	3.28	5.86
	412894	AW584373		gb:PM3-HN0011-200300-001-001 HN0011 Homo	3.00	5.83
	437612	AA827715	Hs.105153	Homo sapiens cDNA FLJ14230 fis, clone NT	3.09	5.82
50	411522	AW850286		gb:IL3-CT0219-161199-031-H11 CT0219 Homo	3.26	5.81
	456910	BE185921	Hs.98073	ESTs	3.20	5.80
	439915	AJ521791	Hs.252358	ESTs	3.55	5.80
	404403	c8p1_1094		exon	3.23	5.80
	405332	cNp3_13017		exon	3.51	5.78
55	411167	AW820204		gb:CV2-ST0296-190100-029-c11 ST0296 Homo	3.04	5.78
	418139	H21109	Hs.172853	ESTs	3.63	5.77
	434222	AF119886	Hs.283941	Homo sapiens PR02591 mRNA, complete cds	3.65	5.77
	415247	F02431	Hs.6581	ESTs	3.08	5.75
	446037	AI076806	Hs.282955	ESTs	3.42	5.75
60	450478	AW451709	Hs.271200	ESTs	3.80	5.72
	446588	AV659343	Hs.282954	ESTs	3.29	5.72
	413118	BE065939		gb:RC3-BT0319-100100-012-c11 BT0319 Homo	3.03	5.72
	416946	NM_012324	Hs.80545	mitogen-activated protein kinase 8 Inter	3.81	5.72
65	454761	AW819132		gb:RC3-ST0281-240400-015-c10 ST0281 Homo	3.06	5.72
	457194	H20669	Hs.35406	ESTs, Highly similar to unnamed protein	3.54	5.71
	438601	AA811713	Hs.163222	ESTs	3.26	5.71
	439032	AA829487	Hs.274412	similar to yeast Upf3, variant A	3.10	5.67
	408940	M58583	Hs.662	cerebellin 1 precursor	3.32	5.67
	437700	AA766060	Hs.122848	ESTs	3.23	5.66
70	416061	R45518	Hs.26119	ESTs	3.85	5.65
	452861	BE177663		gb:RC1-HT0598-020300-011-h11 HT0598 Homo	3.04	5.64
	430330	AA476583	Hs.132981	ESTs	3.51	5.63
	435312	AJ243386	Hs.4865	voltage-gated sodium channel beta-3 subu	5.67	5.62
	400710	c11p1_1297		exon	3.04	5.61
75	457130	NM_005651	Hs.183671	tryptophan 2,3-dioxygenase	3.31	5.60
	434513	AF143888	Hs.18213	Homo sapiens clone IMAGE:121736 mRNA seq	3.93	5.60
	434277	X77748	Hs.3786	glutamate receptor, metabotropic 3	3.67	5.58
	440854	AW444900	Hs.246715	ESTs	3.30	5.58
	457088	AA412591	Hs.204685	ESTs	3.37	5.57
80	431883	AA731404	Hs.105510	ESTs	3.67	5.56
	400758	AA158742	Hs.225084	Homo sapiens cDNA FLJ14280 fis, clone PL	3.43	5.55
	455374	AW904039		gb:CM3-NN1040-200400-158-d03 NN1040 Homo	3.36	5.52
	440750	AW105131	Hs.245405	ESTs	3.10	5.50
	451865	H43737	Hs.33186	ESTs, Weakly similar to unknown protein	3.38	5.50

5	453100	AW806871	Hs.224788	ESTs	3.30	5.49
	433940	H05129	Hs.7459	cyclic AMP-regulated phosphoprotein, 21	3.24	5.49
	454935	AW846075		gb:MR3-CT0176-081089-002-b02 CT0176 Homo	3.26	5.48
	435447	A0872932	Hs.142442	HP1-BP74	3.89	5.47
	402953	c20p3_3451		exon	3.28	5.47
	456233	AA203339		gb:zx56s01.r1 Soares_fetal_liver_spleen_	3.02	5.47
	407718	AW070784	Hs.243243	EST	3.30	5.45
	417429	A050629	Hs.286237	Homo sapiens cDNA FLJ11841 fis, clone HE	3.31	5.38
10	446408	A1797169	Hs.208488	ESTs	3.07	5.37
	441792	AW873635	Hs.143962	ESTs	3.19	5.35
	450681	AW952160	Hs.32916	ESTs	3.70	5.35
	433932	AW954599	Hs.169330	neuronal protein	6.78	5.33
	427002	AA524093	Hs.23158	ESTs	4.00	5.32
15	428741	AA481386		gb:zx70h06.r1 Soares_total_fetus_Nb2HF8_	3.10	5.32
	446383	T05816	Hs.92511	EST	3.39	5.30
	442988	A026130	Hs.131683	ESTs	3.07	5.29
	426713	A055299	Hs.130055	ESTs	3.33	5.29
	421294	AA713488	Hs.180291	ESTs	3.44	5.28
	405452	ph2_21981		exon	3.20	5.28
20	423508	AW604297	Hs.129711	hepatitis A virus cellular receptor 1	3.26	5.27
	442114	BE217975	Hs.157021	ESTs	3.32	5.28
	432508	A080915	Hs.190201	ESTs	3.46	5.26
	425604	U94320	Hs.158330	neuropeptide Y receptor Y5	3.28	5.23
25	417925	R26789	Hs.23395	ESTs	3.08	5.23
	444448	H66317	Hs.143660	ESTs	3.81	5.22
	413024	AF038268	Hs.75149	SH3-domain GRB2-like 2	3.71	5.22
	437911	AA848010	Hs.124250	ESTs	3.11	5.18
	435406	F26698	Hs.4884	calcium/calmodulin-dependent protein kin	4.95	5.17
30	407131	R98679		gb:yr31c03.s1 Soares fetal liver spleen	3.30	5.16
	435776	A1537162	Hs.263988	ESTs	3.14	5.13
	455532	AW994828		gb:RC1-HN0015-120400-021-h11 HN0015 Homo	3.14	5.13
	457352	AA489099		gb:aa56h09.s1 NCI_CGAP_GC81 Homo sapiens	3.48	5.12
	428670	AA431682	Hs.134832	ESTs	3.17	5.12
35	445962	A1268410	Hs.201386	ESTs	3.14	5.12
	418153	R13696	Hs.112830	ESTs	3.16	5.10
	440565	AW103823	Hs.131588	ESTs	3.08	5.10
	431446	AW294929	Hs.255369	Homo sapiens cDNA FLJ10265 fis, clone HE	3.42	5.09
	456036	BE536654	Hs.75839	zinc finger protein 6 (CMPX1)	3.21	5.09
40	420883	A1735488	Hs.111436	ESTs	3.17	5.08
	455528	AW984757		gb:RC1-HN0015-040400-011-g10 HN0015 Homo	3.35	5.08
	408442	R59608	Hs.21435	ESTs	3.10	5.07
	446093	A1346849	Hs.145896	ESTs	3.30	5.06
	403489	c3p1_2255		exon	3.43	5.05
45	405278	cNp3_1070		exon	3.05	5.03
	412804	H18857	Hs.22547	ESTs	3.63	5.03
	458407	W90022	Hs.186809	ESTs, Highly similar to LECT2 precursor	3.62	5.03
	407387	AA130773		gb:zo13d01.r1 Stratagene colon (937204)	3.51	5.02
	439108	AW163034	Hs.6467	synaptogyrin 3	5.63	5.01
50	445335	A1220339	Hs.166775	ESTs	3.21	5.01
	435404	A1240661	Hs.124995	ESTs	3.99	5.00

TABLE 6B:

Pkey:	Unique Eos probeset identifier number
CAT number:	Gene cluster number
Accession:	Genbank accession numbers

55	Pkey	CAT Number	Accession
	410837	282574_1	AW806917 AW866469 BF898475 BF898476 AW866540 AW866614 BE145698 AW866575
60	436812	659778_1	AW978773 AW298087 AA810101 AW194180 AA731645 AJ690673
	454171	1049240_1	AW854832 AW854798 AW854857 AW854816 AW854834 AW854817
	454589	28039_6	BG674750 BF374578 AW810080 AW810106 AW810084 BF374755 AW809621 BF374734 BF374590 BF374594 AW809699 BF374588 AW810437
	417159	2075888_1	AW810161 AW809582 AW810151
65	459349	1027822_1	R01760 N49787 R01761
	414187	315279_1	AW749381 H93337
	423280	881045_1	BE259777 BE312141 BF942980
	431400	1233916_1	AW955178 H86636 AA324037
70	454566	164604_1	AW969094 AA504607 AA504705
			AW807605 AW807690 AW807677 AW807752 AW807673 AW807900 AW807955 AW807679 AW807615 AW807917 AW807849 AW807832 AW807821
			AW807842 AW807827 AW807754 AW807830 AW807829 AW807825 AW807819 AW807769 AW807685 AW807803 AW807783 AW807612 AW807840
			AW807908 AW807684 AW807609 AW807596 AW807595 AW807593 AW807907 AW807902 AW807846 AW807756 AW807687 AW807838 AW807835
			AW807770 AW807753 AW807669 AW807678 AW807688 AW807680 AW807688 AW807847 AW807957 AW807674 AW807602 AW807617 AW807921
			AW807657 AW807952 AW807918 AW807670 AW807760 AW807956 AW807608 AW807683 AW807839 AW807601 AW807822 AW807898
			AA772920 D59870 D61151 AJ591331 BF960996
75	437948	330397_1	AW979114 AA828060 AA837606 AA829203
	438919	1242618_1	BE150647 AW971143 AW809224 AW809221 BF753820 AW809220 AW809178 AW809150 AW809195 AW809175
	454578	1870_3	BE145800 BE145921 BE145873 BE145871 BE145930 BE145797 BE145795
	455836	1518824_1	AW848278 AW849039 AW847958 AW847957 AW849046 AW848698 AW849034 AW849033
	454968	1085677_1	T11756 T20135 T19729 T11658 T11616 R45874
80	418162	2189291_1	AW971240 AA493723 AA493843
	431169	1235760_1	BE007237 BE546311 AA984819 B1256810 W19919 BE007263 BG000322 BF327011 AA890198 BE007496
	458172	353900_1	W04156 AW897535 N94221
	412172	709034_1	BE543651 AA417856 AV756446 BG505084 B1460307 B1460993 BG613293
	427942	465947_1	BF375123 AW814472 AW814474 AW813343 AW818181 AW813380 AW813300
	454588	1066481_1	

5	455675	1490763_1	BE065984 BE066085 BE065942 BE065955
	455644	1489581_1	BE064521 BE064441 BE064426 BE064285 BE064286
	451496	85420_1	AA046879 BF327988 AW503407 AA018131
	424617	895912_1	AW963059 AA344151 AA344472
	454962	323094_1	AW853945 AW854083 BF962818 AW847791 BI035483 AW847645 BF961514 BF963484 BF952264 BF963521
	455260	231032_1	BE161805 AW878317 BE161759 BF870032 BF869588
	434589	14876_1	AF147363 T47219 T47218
	410926	1084369_1	AW810708 AW810808 AW810771 AW810924
10	405623	830636_1	AW449665 BE220971 AW449185
	437254	1239876_1	AW976161 AA831258 AA765857 AA747712 AJ784019
	415508	1874742_1	R45579 F10822 R39238
	413263	1497122_1	BE075132 BE075131 BE075130 D60395 BF688035
	415967	189490_1	H49130 H11230 BF363165 H49061 H11124
	417556	1978200_1	AA203678 AL697143 H65368
15	413547	1520005_1	BE147456 BE147563 BE147708 BE147440
	411132	1070974_1	AW819177 AW819242 AW819191 AW819175 AW819252 AW819244 AW819265 AW819269 AW819190 AW819268 AW819183 AW819246 AW819194
	454568	1061859_1	AW819249 AW819186 AW819180 AW819188 BE158470 AW819251 BE152602 AW819263
20	413162	1492355_1	AW807809 AW807824 AW807826 AW807903 AW807766 AW807750 AW807911 BE141434 AW807611 AW807837 AW807899 BF374481
	455377	154707_1	BE068104 BE068096 BE068198 BE068115 BE068102 BE068154 BE068103
			BF947516 AW905291 BF947512 BF952606 BF952706 BF952525 BF952524 BF952619 BF947500 BF952608 BF952523 BF952532 BF952344
			BF746516 BF947614 BF746511 BF952358 AW905400 AW905300 BF947617 AW905349 BF952531 AW905403 BF952528 BE081655 BF746513
			AW905286 BF952868 BF947513 BF947510 BF947618 BF947619 AW905347
			AW861879 AW861948 AW858447 AW861873 AW858418 AW861871
25	412686	1243154_1	AW984068 AW984077 AW984072
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	412290	1163352_1	BE069037 BE069178 AW936034 AW936025
	411427	1083097_1	AW846080 AW846074 AW846118 AW846130
	410816	1060611_1	AW806175 AW806176 AW806170 AW806156
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	411138	1071173_1	AW819500 AW819503 AW819481 AW819459 BF375618
	454713	1087889_1	AW815111 AW815094 AW815218
35	455965	1555935_1	BE167014 BE167058 BE167062
	416268	1959926_1	H41854 H49111 H46317
	443100	416959_1	BE004743 AW804074 BE089437 BE089439 BE089378 BE089438 BE004795 W02375 AJ033188 BF332422 BF332418 BE178660
	408070	632273_1	AW148852 BG994152
	425440	1228191_1	AW962960 AA357518 AA360531
40	412317	1164038_1	AW991979 AW991981 AW991983 AW936856 AW991977 AW991971 AW936852
	453839	320657_1	AL138417 AL138418
	419392	215562_2	W28573 W27418
	412018	147109_1	BE148133 BE148132 BF736564 BE148152 BE148159 BF893700
	411265	1074383_1	AW834695 AW834717 AW834714
45	412734	1245451_1	AW993498 AW993484 AW993490 BF512974
	412694	1243393_1	AW984388 AW984392 AW984379 AW984351 AW984381 AW984377 AW984366 AW984348 AW984391 AW984373 AW984372 AW984353 AW984362
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	411167	1071740_1	AW820323 AW820314 AW820321
	413118	1490760_1	BE066079 BE065939 BE065958
50	454751	1070838_1	AW819132 AW819122 AW819018 AW819135 AW819126 AW819024 AW819012 AW819141
	452861	319757_1	BE177663 AW994738 AJ923735 BF948431 BF948329
	455374	1161013_1	AW904029 AW904030 AW904039 AW904031 AW904032 AW904046
	454935	1083098_1	AW846075 AW846103 BF333978 AW846077 AW846122 AW846129 AW846096 AW846076 BF333979 BF333978 AW846092
	456233	2635744_1	AA203339 AA906160 AA929005
	428741	1384399_1	AA461386 AA433841 AA433845
55	455532	1243692_1	AW984828 AW984787 AW984806 AW984817 AW984826 AW984822 AW984773 AW984786 AW984803 AW984796
	457352	1233795_1	AW968968 AA489099 N72933 AA489184
	455528	1243660_1	AW984734 AW984757 AW984797 AW984745
	407387	4907_1	AF085963 H72550 H72951 AA130773
60	TABLE 6C:		
	Key:	Unique number corresponding to an Eos probeset	
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.	
	Strand:	Indicates DNA strand from which exons were predicted.	
65	NL_position:	Indicates nucleotide positions of predicted exons.	
	Key	Ref	Strand NL_position
	401412	7940103	Minus 43347-45776
	405230	7249032	Minus 97493-97682
70	402125	4033680	Plus 172732-172868
	404289	2769544	Plus 15049-15286,30267-30457
	406534	7711477	Plus 40463-40588,41191-41336,41856-41986,4300
	405348	2914717	Minus 43310-43462
	401081	3478647	Plus 105163-105305
75	402624	7885063	Minus 31308-31439
	405320	3478667	Minus 118511-118926,119175-119331
	405476	2121229	Plus 69890-70883
	403932	7454203	Minus 8142-8753
	406112	9133145	Plus 61863-62028
80	400708	7249204	Plus 118115-119445
	405427	7243901	Minus 6509-6729
	402816	6723302	Minus 25104-25291
	404541	8318559	Plus 103456-103664



403008	6070396	Plus	94508-94785,95096-95233
403395	9438353	Minus	144947-145075
403061	8954192	Plus	142875-143008
403717	7259747	Minus	79166-79758
401313	9212516	Minus	190842-191090
405961	8180197	Plus	45132-45254
404403	7272157	Minus	72053-72238
405332	3169141	Minus	70483-71207
400710	7249204	Plus	158753-157120
402953	9408724	Minus	122603-122743
405452	9588380	Minus	76322-76427
403489	7331314	Minus	38897-39212
405278	6139075	Minus	3863-3965,4823-4891,5439-5529,6043-6170

TABLE 7A: EXTENDED GLOBLASTOMA SEQUENCES: This table includes sequence information for 21 DNA and protein sequences

DNA sequence 1

Gene name: Protein tyrosine phosphatase, receptor-type, 2 polypeptide 1

Unigene number: Hs.78867

Probeset Accession #: M93426

Nucleic Acid Accession #: NM\_002851

Coding sequence: 148-7092

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	CGGCGAGGGG	CCGCAAGACG	TCTGGAAATG	CGAATCCTAA	AGCGTTTCCT	CGCTTGCAAT 180
	CAGCTCCTCT	GTGTTTGCCG	CCTGGATTGG	GCTAATGGAT	ACTACAGACA	ACAGAGAAAA 240
30	CTTGTTGAAG	AGATTGGCTG	GTCTATACA	GGAGCACTGA	ATCAAAAAAA	TTGGGGAAAG 300
	AAATATCCAA	CATGTAATAG	CCCAAAACAA	TCTCCTATCA	ATATTGATGA	AGATCTTACA 360
	CAAGTAAATG	TGAATCTTAA	GAAACTTAAA	TTTCAGGGTT	GGGATAAAAC	ATCATTGGAA 420
	AACACATTCA	TTCATACAC	TGGGAAAAAC	GTGGAAATTA	ATCTCACTAA	TGACTACCGT 480
	GTACGCGGAG	GAGTTTCGAG	AATGGTGTGT	AAAGCAAGCA	AGATAACTTT	TCACTGGGGA 540
35	AAATGCAATA	TGTCATCTGA	TGGATCAGAG	CATAGTTTAG	AAGGACAAAA	ATTTCACATT 600
	GAGATGCAAA	TCTACTGCTT	TGATGCGGAG	CGATTTTCAA	GTITTTGAGGA	AGCAGTCAAA 660
	GGAAAAGGGG	AGTTAAGAGC	TTTATCCATT	TTGTTTGAGG	TTGGGACAGA	AGAAAAATTTG 720
	GATTTCAAG	CGATTATTGA	TGGAGTCGAA	AGTGTTAGTC	GTITTTGGGAA	GCAGGCTGCT 780
	TTAGTCCAT	TCATACTGTT	GAACCTTCTG	CCAAACTCAA	CTGACAAGTA	TTACATTTAC 840
40	AATGGCTCAT	TGACATCTCC	TCCTTGCAAC	GACACAGTTG	ACTGGATTGT	TTTTAAGAT 900
	ACAGTTAGCA	TCTCTGAAG	CCAGTTGGCT	GTITTTTGTT	AAGTTCCTAC	AATGCAACAA 960
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	TTCTCTAGAC	AGGTGTTTTT	CTCATACACT	GGAAAGGAAG	AGATTTCATGA	AGCAGTTTGT 1080
	AGTTCCAGAC	CAAAAAATGT	TCAGGCTGAC	CCAGAGAATT	ATACCAGCCT	TCTTGTTACA 1140
45	TGGGAAGAGC	CTCGAGTCGT	TTATGATACC	ATGATTGAGA	AGTTTGCACT	TTTGTACCAG 1200
	CAGTTGGATG	GAGAGGACCA	AACCAAGCAT	GAATTTTGA	CAGATGGCTA	TCAAGACTTG 1260
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50	AATCCTGAAC	TTGATCTTTT	CCCTGAATTA	ATTGGAAGTG	AAGAAATAAT	CAAGGAGGAG 1440
	GAAGAGGGAA	AAGACATTGA	AGAAGGCGCT	ATTGTGAATC	CTGTAGAGA	CAGTGTACA 1500
	AACCAATACA	GGAAAAAGGA	ACCCAGATT	TCTACCAAC	CACACTACAA	TCGCATAGGG 1560
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55	GAAGGTACTT	CAGCCTCTTT	AAATGATGGC	TCTAAAACGT	TTCTTAGATC	TCCCATATG 1800
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**Protein sequence 1**

Gene name: Protein tyrosine phosphatase, receptor-type, 2 polypeptide 1

Unigene number: Hs.78867

Protein Accession #: NP\_002842

Signal sequence: 1-20

Pfam domain: carb anhydrase [38-300]

Transmembrane domains: 1639-1661

Cellular Localization: plasma membrane

1 11 21 31 41 51  
 | | | | |

5	MRILKRFLAC IQLLCVCRLD WANGYVROQR KLVEEIGWSY TGAHQKRWG KKYPTCNPK 60
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	FKASKITPHN OKCNMSSDGS EHSLEGQKFP LEMQIYCPDA DRPSSFEAV KKGKGLRALS 180
	ILFEVGTBEN LDFKALIDGV ESVSRRFGKQA ALDPFILLNL LFNSTDKYYI YNGSLTSPPC 240
	TDVVDWIVFK DTVSISBSQL AVFCEVLTMQ QSGYVMLMDY LQNNFRQOQY KFSRQVFSY 300
	TGKEEIRRAV CSSEPEVQA DPENYTLVLV TWERPRVVDY TMIEKFAVLY QQLDGEDQTK 360
	HEFLTQGYQD LGAILNNLLP NMSYVLQIVA ICTNGLYGYK SDQLIVDMPT DNPDLDFPPE 420
	LIGTEEIIKE EEEGKDIEEG AIVNPGORDA TNQIRKKEPO ISTTTHYNRI GTKYNEAKTN 480
10	RSPTRGSEFS QKGDVPNTSL NSTSQPVTKL ATEKDIBLTS QTVTELPPHT VEGTSASLND 540
	GSKTULRSFH MNLGOTAESL NTVSITYEYB ESLLTSPKLD TGAEDSSGSS PATSAIPFIS 600
	ENISQGYIPS SENPETITYD VLIPESARNA SEDSTSSGSE ESKLDPSEMG NNVFPPSTDI 660
	TAQFDVGSGR ESFLQNTYE IRVDESEKTT KSPSAGPVMS QGSPVTDLEM PHYSTPAYFP 720
	TEVTFHAPT SSKQDLVST VNVVYSQTTQ FVYNGETPLQ FSYSEVFPL VTPLLLDNQI 780
15	LNTTPAASSS DSAHATPVF PSVDVSPESI LSSYDGAPLL PFSSASFSSE LFRHLHTVSQ 840
	ILPQVTSATE SDKVPPLHASL FVAGDILLLE PSLAQYSDVL STTHAASETL EPGSESVLY 900
	KLTMFSQVEP PSSDAMMHAR SSGFEPYAL SDNEGSHQIP TVSYSSAIFV HDSVGVITYQG 960
	SLFSGPSHIP IPKSSLITPT ASLLQPTHAL SGDGEHSGAS SDSEFLLPDT DGLTALNIS 1020
20	PVSVAEFTYT TSVFGDDNKA LSKSEIIFYGN ETELQIPSPN EMVYPSSESTV MPMYDYNVK 1080
	LNASLQETSIV SISSTKGMFP QSLAHITTKV FDHEISQVPE NNFVQVPTH VSQASGDTSL 1140
	KPVLASNEP ASSDPASSEM LSPSTQLLFY ETSASFSTEV LLQPSQASD VDTLLKTVLP 1200
	AVPSPILVE TPVKVDKIST MLBLIVSNEA SSENMLASTS VPVFDVSPTS HMHSASLQGL 1260
	TIYSASEKYE PVLLKSESH QVPSLYSND ELFQTANLEI NQAHPPKGRH VFPATVLSID 1320
25	EPNLTINKL IHSDELITST KSVSTGKVA GIPTVASDTF VSTDHVSPIG NGHVAITAVS 1380
	PHRDGSVTST KLFPPKATS ELSHSAKSDA GLVGGGDDGD TDDDDDDDD RDSGLSIEK 1440
	CMSCSYRES QEKVMDSOT HENSLMDQNN PISYSLSENS EEDNRVTSVS SDSQTGMDR 1500
	PGKSPSANGL SQGHNDGKEE NDIGTQSALL PLSPEKANA VLTGDEESGS QGQTSDBSNE 1560
	NETSTDFSPA DTNEKDADGI LAAGDSEITP GFQSPSTSSV TSENSEVFHV SEAEASNSH 1620
	ESRIGLAELG ESEKKAVIDP VIVSALTFIC LVVLVGLIY WRKCFQTAHF YLEDSSTPRV 1680
30	ISTPPTPIFP ISDDVGAIFI KHFFKHVADL HASSQFTEEP STLKEFYQEV QSCSTDGLIT 1740
	ADSENHPDNK HKQRYINIVA YDHSRVKLQA LAEKDGKLT YINANYVDGY NRPKAYIAAQ 1800
	GPLKSTADEP WRMINENVE VIVMIDNLVE KGRKCDQYN PADGSEYGN FLVTQKSVQV 1860
	LAYTTRNFT LRNTKKKKGS QKGRPSORVV TQVRYTQMPD MGVEYSLPV LTFVRKAAY 1920
	KRHAVGPVVV HSBAGVGRTG TYIVLDSMLQ QIQHEGTVNI FGFLKHRSQ RNYLVQTEEO 1980
35	YVFIHDTLVE AILSKETEVL DSHIHAYVNA LLIPGPAGKT KLEKQPOLLS QSNIQQSDYS 2040
	AALKQCNREK NRTSSIIPE RSRVGISSL GEGTDYINAS YIMGYQSNB FIITQHPLH 2100
	TIKDFWRMIW DRNAQLVMMI PDGQNMASDE PVVWPNRDEP INCSEFKVTL MAEHHKCLSN 2160
	EEKLIQDFI LEATQDDYVL EVRHFCQPKW PNPDPISKI FELISVKEE AANRDGPMIV 2220
	HDEHGGVTAG TFCALTTLAH QLEKENSVDV YQVAKMLNLM RGPVFADIEQ YQFLYKVLIS 2280
40	LVSTQRENP STSLDSNGAA LPDGNIAESL ESLV

## DNA SEQUENCE 2

Gene name: tyrosylprotein sulfotransferase 1

Unigene number: Hs.110903

Probeset Accession #: D61594

Nucleic Acid Accession #: NM\_003596

Coding sequence: 82-1194

45	1 11 21 31 41 51
	GTAGACTGTC CATGGCCTGA ACATTTTCCG AAAATCATT TGAGCAAAAT ATCTGTTTAA 60
50	TACACAGATA ACCACATCAA GATGGTTGGA AAGCTGAAGC AGAAGTACT ATTGGCATGT 120
	CTGGTGATTA GTTCTGTGAC TGTGTTTAC CTGGGCCAGC ATGCCATGGA ATGCCATCAC 180
	CGGATAGAGG AACGTAGCCA GCCAGTCAAA TTGGAGAGCA CAAGGACCAC TGTGAGAACT 240
	GGCCTGGACC TCAAGGCCAA CAAAACCTTT GCCTATCACA AAGATATGCC TTTAATATTT 300
55	ATTGGRGGTG TGCTCTGGAG TGGAAACACA CTCATGAGGG CCATGCTGGA CGCACATCCT 360
	GACATTGCGT CTGGAGAGGA AACCAGGGTC ATTCGCCGAA TCCTGGCCCT GAAGCAGATG 420
	TGGTCAACGT CAAGTAAAGA GAAGATCCGC CTGGATGAGG CTGGTGTTAC TGATGAAGTG 480
	CTGGATTCTG CCAATGCAAG CTCTTACTA GAAATTATCG TTAAGCATCG GGAGCCAGCC 540
60	CCTTATTATG GTAATAAAGA TCCTTTTGCC CTGAAATCTT TAACCTACCT TTCTAGGTTA 600
	TTCCCAATG CCAAAATTTCT CCTGATGGTC CGAGATGGCC GGGCATCAGT ACATTCAATG 660
	ATTCTCGAA AAGTTACTAT AGCTGGATT GATCTGAACA GCTATAGGGA CTGTTTGACA 720
	AAGTGAATC GTGCTATAGA GACCATGTAT AACCATGTGA TGGAGGTTGG TTATAAAAA 780
	TGCATGTTGG TTTCACTATGA ACAACTTGTG TTACATCCTG AACGGTGGAT GAGAACACTC 840
	TTAAAGTTCC TCCAGATTCC ATGGAACCA CAGATTATGC ACCATGAAGA GATGATTGGG 900
65	AAAGCTGGGG GAGTGTCTCT GTCAAAAGTG GAGAGATCTA CAGACCAAGT AATCAAGCCA 960
	GTCAATGTAG GAGCTCTATC AAAATGGGT GGAAGATAC CGCCAGATGT TTTACAGAC 1020
	ATGGCAGTGA TGCTCTCTAT GCTTGCCAG CTTGATATG ACCCATATGC CAACCCACCT 1080
	AACACGGA AAACCTGATCC CAAAATTAT GAAAACACTC GAAGGGTCTA TAAGGGAGAA 1140
70	TTCCAACTAC CTGACTTTCT TAAAGAAAAA CCACAGACTG AGCAAGTGA GTAGCAGAAC 1200
	CAGGAGCCTC TTCCATACAT GAGGAAAGAT TGCTGCTTT TCAACAGAA GGAATTCCT 1260
	AGGATTGGCT GTCCCTGCC AAGCTTGGTG GAGGCTCTGC ACCTTGGCTG CGCGCCTGT 1320
	GCAATTGCCA GTTCTCTCCC ACTGAGAGGA TGGAGGTGTC GCACAGCTT TGGGCTCGT 1380
	GAGGGATCTG CCTCCTGAGC AAAGAGCTCT TGATCCGAT TTCAATGACA GCCCTGCAGT 1440
	AAGGAGCCCA GAAGGAACAT GTGTTCTCTG TTAATACTCC TCTTGTCTTC TTTTCTTACA 1500
75	TTATGACGTT TGTITTCAGG GAGAGGGTTT AAAAATGGGA TCTGTAAAGC AGACTTGGGC 1560
	AGTCTCCTTT TGAATAGGT TGTCTGTACA TGTCTAATG TTTTGTAGAA CAGCTGTGCC 1620
	TGTTTAAGTG TATTGATGTG AATAATATTA AATATCTAA TTATTTAAT CATTTGATTG 1680
	TTTCTGAGAA GTTGGGAAAT TACCATTATA CATTTACAC CTAATGACTT TGTATTATTA 1740
80	TTTTCAAAA TAAAGCTTT CAATGTGA

## Protein sequence 2

Gene name: tyrosylprotein sulfotransferase 1

Unigene number: Hs.110903

Protein Accession #: NP\_003587

Signal sequence: 1-21

Transmembrane domains: none found  
 Cellular Localization: plasma membrane

1	11	21	31	41	51	
5	MVGKLKQNL	LACLVISSVT	VFLGQHAME	CHRIERSQ	PVKLESTRIT	VRTGLDLKAN
	KTFAYHKDMP	LIFIGGVPRS	GTTLMRAMLD	ABPDIRCGBE	TRVIPRILAL	KQMWSRSSKE
	KIRLDEAGSV	DEVLDAMQA	FLLEIIVKHG	EPAPYLCNKD	PPALKSLTYL	SRLFPNAKPL
	LMVRDGRASV	HSMISRKVTI	AGFDLNSYRD	CLTKMNRATB	TMYNQCMVEG	YKCNLHVHYE
10	QLVLHPRMM	RTLKFLQIP	WNHSLVHHEE	MIGKAGGVSL	SKVERSTDQV	IKPVMVGALS
	KWVGKIPFDV	LQDMAVIAPM	LAKLGYDPYA	NPPNYKPDFE	KIIENTRRVY	KGEPLPDPL
	KKFPQTEQVE					360

DNA sequence 3  
 Gene name: interleukin 13 receptor, alpha 2  
 Unigene number: Hs.25954  
 Probeset Accession #: R52795  
 Nucleic Acid Accession #: NM\_000640  
 Coding sequence: 94-1236

1	11	21	31	41	51	
20	CGGATGAAGG	CTATTGAAG	TCGCCATAAC	CTGGTCAGAA	GTGTGCCTGT	CGGCGGGGAG
	AGAGGCCAATA	TCAAGGTTTT	AAATCTCGGA	GAAATGGCTT	TCGTTTGCTT	GGCTATCGGA
	TGCTTATATA	CCTTCTGAT	AAGCACAACA	TTGGCTGTGA	CTTCATCTTC	AGACACCGAG
25	ATAAAAGTTA	ACCTCTCTCA	GGATTITGAG	ATAGTGGATC	CCGGATACCT	AGGTITATCTC
	TATTGCAAT	GGCAACCCCC	ACTGTCTCTG	GATCATTTTA	AGGAATGCAC	AGTGGAAATAT
	GAACATAAAT	ACCGAAACAT	TGGTAGTGAA	ACATGGAAGA	CCATCATTAC	TAAGAATCTA
	CATTACAAG	ATGGGTTTGA	TCTTAACAAG	GGCATTGAAG	CGAAGATACA	CACGCTTTTA
	CCATGGCAAT	GCACAAATGG	ATCAGAAAGT	CAAAGTTCCT	GGGCAGAAAC	TACTTATTGG
30	ATATCACCA	AAGGAATTC	AGAACTAATA	GTTCAGGATA	TGGATTGCGT	ATATTACAAT
	TGGCAATATT	TACTCTGTTT	TTGGAACCT	GGCATAGGTG	TACTTCTTGA	TACCAATTAC
	AACTGTGTTT	ACTCGTATGA	GGGCTTGGAT	CATGCATTAC	AGTGTGTTGA	TTACATCAAG
	GCTGATGGAC	AAAATATAGG	ATGCAGATTT	CCCTATTGCG	AGGCATCAGA	CTATAAAGAT
	TTCTATATTT	GTGTTAATGG	ATCATCAGAG	AACAAGCCTA	TCAGATCCAG	TTATTTCATC
35	TTTCAGCTTC	AAAATATAGT	TAAACCTTTG	CGCCAGTCTC	ATCTTACTTT	TACTCGGGAG
	AGTTCAATGG	AAATTAAGCT	GAAATGGAGC	ATACCTTTGG	GACCTATTCC	AGCAAGGTGT
	TTGATTTAT	AAATTGAGAT	CAGAGAAGAT	GATACACTAC	TGGTGACTGC	TACAGTTGAA
	AATGAACAT	ACACCTTGAA	AACAACAAAT	GAAACCCGAC	AATTATGCTT	TGTAGTAAGA
	AGCAAAAGTA	ATATTATTGG	CTCAGATGAC	GGAATTTGGA	GTGAGTGGAG	TGATAAACAA
40	TGCTGGGAAG	GTGAAGACCT	ATCGAAGAAA	ACTTTGCTAC	GTTCCTGGCT	ACCATTGGGT
	TTTATCTTAA	TATTAGTTAT	ATTGTAAACC	GGTCTGCTTT	TGGTAAGGCC	AACACCTTAC
	CCAAAATGA	TTCCAGAATT	TTTCTGTGAT	ACATGAAGAC	TTTCCATATC	AAGAGACATG
	GTATTGACTC	AACAGTTTCC	AGTCATGGCC	AAATGTTCAA	TATGAGTCTC	AATAAACTGA
	ATTTTCTCT	CGAAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
45	AA					1380

Protein sequence 3  
 Gene name: interleukin 13 receptor, alpha 2  
 Unigene number: Hs.25954  
 Probeset Accession #: R52795  
 Protein Accession #: NP\_000631  
 Signal sequence: 1-23  
 FN3 domain: 155-322  
 Transmembrane domains: 340-362  
 Cellular Localization: plasma membrane

1	11	21	31	41	51	
55	MAFVCLAIGC	LYTFLISTTF	GCTSSSDTBI	KVNFPQDFEI	VDPGYLGYLE	LQWQPLSLD
	HFKECTVEYE	LKYNIGSET	WKTIIITKHL	YKDGFDLNGK	IEAKIHTLLP	WQCTNGSEVQ
60	SSWAETTWI	SPOGIPETKV	QDMDCVYVNM	QVLLCSWKPG	IGVLLDTNVM	LPWYEGLDH
	ALQCVDYIKA	DQGNIGCRFP	YLEASDVYKDF	YICVNGSSEN	KPIRSSYFTF	QLQNIWKPLP
	PVYLTFPTRES	SCEIKLWWSI	PLGPIPARCF	DYBIEIREDD	TTLVATATVN	ETVTLKTINE
	TRQLCFVVR	KVNIYCSDDG	IWSEWSRQC	WEGEDLSKKT	LLRFLMPPGF	ILILVIPVTG
	LLLRKPNTYP	KMIPFPFCDT				360

DNA sequence 4  
 Gene name: chemokine (C-X3-C) receptor 1  
 Unigene number: Hs.78913  
 Probeset Accession #: U20350  
 Nucleic Acid Accession #: NM\_001337  
 Coding sequence: 46-1113

1	11	21	31	41	51	
75	GGGCGAGATC	CAGATTCCTT	TTGCACTCCA	CGCCAGGCCT	TCACCATGGA	TCAGTTCCCT
	GAATCAGTGA	CAGAAAACCT	TGAGTACGAT	GATTGGCTG	AGGCTGTGTA	TATTGGGGAC
	ATCGTGCTCT	TGGGACTGT	GTTCCTGTCC	ATATTCTACT	CCGTCATCTT	TGCCATTGGC
	CTGGTGGGAA	ATTGTGTTGT	AGTGTGTTGC	CTCACCACAA	GCAAGAGGCC	CAAGAGTGTC
	ACCGACATTT	ACCTCTCTGA	CCTGGCCTTG	TCTGATCTGC	TGTTTGTAGC	CACTTTGGCC
	TTCTGGACTC	ACTATTGTAT	AAATGAAAAG	GGCTCCACA	ATGCCATGTG	CAAAATCACT
80	ACCGCTTCT	TCTTCATCGG	CTTTTTTGA	AGCATATTCT	TCATCACCGT	CATCAGCATT
	GATAGTATCC	TGGCCATCGT	CCTGGCCGCC	AATCCATGAA	ACAACCGGAC	CGTGACGAT
	GGCGTCACCA	TCAGCCTAGG	CGTCTGGGCA	GCAGCCATTT	TGGTGGCAGC	ACCCAGTTTC
	ATGTTACACA	AGCAGAAAGA	AAATGAATGC	CTTGGTGACT	ACCCGAGGT	CCTTCAGGAA
	ATCTGCCCG	TGCTCCGCAA	TGTGGAAACA	AATTTCTTGT	GCTTCTGACT	CCCCCTGCTC
	ATTATGAGTT	ATTGCTACTT	CAGAAATCATC	CAGAOGCTGT	TTTCTGCAA	GAACCAACA
						720

5 AAAGCCAAAG CCATTAACT GATCCCTCTG GTGGTCATCG TGTTTTCTCT CTCTGGACA 780  
 CCTACAAAG TTATGATTTT CCTGGAGAGC CTTAAGCTCT ATGACTTCTT TCCCAATTGT 840  
 GACATGAGGA AGGATCTGAG GCTGGCCCTC AGTGTGACTG AGACGGTTCG ATTTAGCCAT 900  
 TGTGTGCTGA ATCTCTCAT CTATGCAATT GCTGGGGAGA AGTTCAGAAG ATACCTTTAC 960  
 CACCTGTATG GGAATAGCCT GGCTGTCTCT TGTGGGCGCT CAGTCCACGT TGATTTCTCC 1020  
 TCATCTGAAT CACAAAGGAG CAGGCATGGA AGTGTCTGTA GCAGCAATTT TACTTACCAC 1080  
 ACCAGTGAAT GAGATGCATT GCTCCTTCTC TGAAGGGAAT CCCAAGACCT TGTGTCTACA 1140  
 GAGAACCCTG AGTTCCTGAA CCTGATGCTG ACTAGTGAGG AAGATTTTGT TTGTTATTTT 1200  
 10 TTACAGGCAC AAAATGATGG ACCCAATGCA CACAAACAA CCTAGAGTG TTGTTGAGAA 1260  
 TTGTGCTCAA AATTGTGAAG ATGAACAAAT TGAACCTTTT GAATGACAAA GAGTAGACAT 1320  
 TTCTCTTACT GCAAAATGTA TCAGAACTTT TTGGTTTGCA GATGACAAAA ATTCAACTCA 1380  
 GACTAGTTTA GTTAAATGAG GGTGTGGAAT ATTGTTCTA TTGTGGCACA AGCAAAAAGG 1440  
 GTGTCTGAGC CCTCAAGATG AGGGGAACCA GGGCCTGAGC CAAGCTA

15 **Protein sequence 4**  
 Gene name: chemokine (C-X3-C) receptor 1  
 Unigene number: Hs.78913  
 Protein Accession #: NP\_001328  
 Signal sequence: 1-44  
 Pfam domain: 7tm\_1 [48-293]  
 Cellular Localization: plasma membrane  
 1 11 21 31 41 51  
 25 MDQPPESVTE NFEYDDLAE A CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVPALTNSK 60  
 KPKSVTDIYL LNLALSDLLF VATLPFWTHY LINEKGLHNA MCKPTTAPFP IGPFSGIPFI 120  
 TVISIDRYLA IVLAANSMMN RTVQHGVVIS LQVWAAAILV AAPQPMPTKQ KENECLGDYP 180  
 EVLQBEIWPVL RNVEITFLGF LLPLLIMSVC YFRIIQTLSF CKNHKKAKAI KLILLVVIVP 240  
 FLFWPTPNVM IPLETLKLYD FFPSCDMRKO LRLALSVTET VAFSHCCINP LIYAPAGEKF 300  
 30 RRVLYHLGYK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPTYHTSDGP ALLLL

DNA sequence 5  
 Gene name: cannabinoid receptor 1 (brain)  
 Unigene number: Hs.75110  
 Probeset Accession #: 412986  
 Nucleic Acid Accession #: NM\_001840  
 Coding sequence: 92-1510  
 1 11 21 31 41 51  
 40 TCGGCTTATT TGTITTCCTT CCTCTTAGGA TTGCCCTCTG TGGGTCACTT TCTCAGTCAT 60  
 TTTGAGCTCA GCCTAATCAA AGACTGAGGT TATGAAGTCG ATCCTAGATG GCCTTCGAGA 120  
 TACCACCTTC CGCACCATCA CCATGACCTT CCGTACGCTG GGCTCAAATG ACATTCAGTA 180  
 CGAAGACATC AAGAGTGACA TGGCATCCAA ATTAGGGTAC TCCCCACAGA AATTCCTTTT 240  
 AACTTCTCTT AGGGGAAGTC CCTTCCAAGA GAAGATGACT GCGGGAAGACA ACCCCAGACT 300  
 45 AGTCCACGCA GACCAGGTGA ACATTACAGA ATTTTCAAC AAGTCTCTCT CGTCCCTCAA 360  
 GAGAAATGAG GAGAACATCC AGTGTGAGGA GAACCTCATG GACATAGAGT GTTTCATGGT 420  
 CCTGAACCCC AGCCAGCAGC TGGCCATGTC AGTCTGTGCC CTCACGCTGG GCACCTTCAC 480  
 GGTCTCTGAG AACCTCTCTG TGTGTGCGT CATGCTCCAC TCCCGCAGCC TCCGCTGCAG 540  
 GCTTCTCTAC CACTTCATCG GCAGCCTGGC GGTGGCAGAC CTCCTGGGGA GTGTCTATTT 600  
 50 GTTCAAACCTG GGTGGGGTCA CGGCCCTCTT CACTGCTCTC GTGGGCAGCC TGTTCCTCAC 720  
 AGCCATCGAC AGGTACATAT CCATTACAG GCGCCCTGGC TATAAGAGGA TTGTCCACAG 780  
 GCGCAAGGCC GTGGTGGCGT TTTGCCCTGAT GTGGACCATTA GCCATTGTGA TCGCCGTGCT 840  
 GCTCTCTCTG GGCTGGAAC TGCAGTCTGT GCAATCTGTT TGCTCAGACA TTTTCCACAT 900  
 55 CATTTGATGA ACCTAAGTGA TGTCTCTGAT CGGGGTCAAC AGCGTACTGC TTCTGTTTCA 960  
 CGTGTATGCG TACATGTATA TTCTCTGAAA GGCTCACAGC CACGCGCTCC GCATGATTCA 1020  
 CGGTGGCACC CAGAGAGGCA TCATCATCCA CACGTCTGAG GATGGGAAGG TACAGGTGAC 1080  
 CGGGCCAGAC CAAGCCGCGA TGGACATTAG GTTAGCCAA GACCTGGTCC TGATCCTGGT 1140  
 GGTGTTGATC ATCTGCTGGG GCGCTCTGCT TGCAATCATG GTGTATGATG TCTTTGGGAA 1200  
 60 GATGAACAAG CTCATTAAAG CGGTGTTTGC ATTCTGCACT ATGCTCTGCC TGCTGAATCT 1260  
 CACCGTGAAC CCCATCATCT ATGCTCTGAG GAGTAAGGAC CTGCGACAAG CTTTCCGGAG 1320  
 CATGTTTCCC TCTTGTGAAG GCACTGCGCA GCCTCTGGAT AACAGCATGG GGGACTCGGA 1380  
 CTGCTCTCAC AAACAAGCAA ACAATGCAGC CAGTGTTCAC AGGCGCCGAG AAAGCTGCAT 1440  
 CAAGAGCACA GTCAAGATTG CCAAGGTAA CAGTCTGTG TCCACAGACA CTTCTGCGA 1500  
 65 GGCTCTGTGA GCTGATGCC TCCCTGGCAG CACAGGAAAA GAATTTTTTT TTTAAAGCTC 1560  
 AAAATCTAGA AAGTCTTATT GTCTCCTTGG TTATATTTTT TTAACCTTAC CATGCTCAAT 1620  
 GAAAAGGTGA TTGTCAACAT GATCACTTAT CAGTTTGCTA ATGTTTCCAT AGTTTAGGTA 1680  
 CTCAAACTCC ATTCTCCAGG GGTTTACAGT GAAGAAAAGC TGTGTTTAA GTGACTGAAC 1740  
 70 GATCCTTCAA AGTCTCAATG AAATAGGAGO GAAACCTTTG GCTACACAA TGGAGTCTA 1800  
 AGAACCCATG GAAAAATGCC ATCAAAATGA TAATGCCTTT GTAACCAAA CTTTCACTAT 1860  
 AATGTGAAAT GTAACTGTCC GTAGTATCAG AGATGTCCAT TTTTACAGT TATAGTACTA 1920  
 GAGATATTTT GTAAAATGTA TTATGTCCTG TGAGATGTGT ATCAGTGTGT ATGTGCTATT 1980  
 AATATTTGTT TAGTTGAGCC AAAGTGAAG GTAGACTTTT ATGAGAACAA TGGACAAGCA 2040  
 75 TGGATACGT GTCATGTGT GCACCTTTTT TCTATATTAT TGCCCATGAT ATAACTTTAG 2100  
 AAATAAACCT TAATATTTCT TCCCAAAAAA AAAAA

Protein sequence 5  
 Gene name: cannabinoid receptor 1 (brain)  
 Unigene number: Hs.75110  
 Protein Accession #: NP\_001831  
 Signal sequence: none found  
 Pfam domain: 7tm\_1 [133-397]  
 Transmembrane domains: 121-143, 156-178, 195-217, 237-259, 276-298, 344-366, 378-400  
 Cellular Localization: plasma membrane  
 1 11 21 31 41 51

5	1	MKSILDGLAD	TFRTITDDL	LYVGSNDIQY	EDIKGDMAK	LGYPFQKFFL	TSFRGSPFQ8	60
		KMTAGDNPOL	VPADQVNITE	FYNKSLSSFK	ENEENIQCGE	NFMDIECFMV	LNPSQQLAIA	120
		VLSLTGLGFT	VLENLLVLCV	ILHSRSLRCR	PSYHFIGSLA	VADLLGSVIF	VYSFIDFHV	180
		HRKDSRNVFL	PKLGGVTASF	TASVGSFLPT	AIDRYISIH	PLAYKRIIVR	PKAVVAFCLM	240
		WTIAIVIAVL	PLLGWNCCKL	QSVCSDFPH	IDETYLMPWI	GVTSLVLLFI	VYAVMYILMK	300
		AHSHAVRMIQ	RGTQKSIH	TSDEGKVQVT	RFDQARMDIR	LAKTLVLILV	VLIICWGPLL	360
		AIMVVDVPOK	MNKLKTVFA	PCSMCLLNS	TVPFIIYALR	SKDLRHAFRS	MFPSCGTAQ	420
10		PLDMSMGSD	CLKHANNAA	SVHRAAESCI	KSTVKIAKVT	MSVSTDTSAE	AL	
		DNA sequence 6						
		Gene name: endothelin receptor type B						
		Unigene number: Hs.82002						
		Probeset Accession #: D13168						
15		Nucleic Acid Accession #: NM_000115						
		Coding sequence: 238-1566						
	1	11	21	31	41	51		
20		GAGACATTCC	GGTGGGGGAC	TCTGGCCAGC	CCGAGCAACG	TGGATCCTGA	GAGCACTCCC	60
		AGGTAGGCAT	TTGCCCGCGT	GGGACGCCTT	GCCAGAGCAG	TGTGTGGCAG	GCCCCCGTGG	120
		AGGATCAACA	CAGTGGCTGA	ACACTGGGAA	GGAACTGGTA	CTTGGAGTCT	GGACATCTGA	180
		AACCTGGCTC	TGAAGACTGC	CAGCGGCCAC	CGGACGCCTT	CTGGAGCAGS	TAGCAGCATS	240
		CAGCGCCTCT	CAAGTCTGTG	CGGACGCGCC	CTGGTGGCGC	TGGTCTCTGC	CTGGCGGCTG	300
25		TGCGGATCT	GGGAGAGGA	GAGAGGCTTC	CGGCTGACA	GGGCCACTCC	GCTTTTGCAA	360
		ACGCGAGAGA	TAATGACGCC	ACCCACTAAG	ACCTTATGCG	CCAAGGGTTC	CAAGCCAGT	420
		CTGGCGCGGT	CGTTGGCACC	TGCGGAGGTG	CCTAAAGGAG	ACAGGACGCG	AGGATCTCCG	480
		CCAGCGACCA	TCTCCCTCC	CCGTTGCCAA	GGACCCATCG	AGATCAAGGA	GACTTTCAAA	540
		TACATCAACA	CGGTGTGTCT	CTGCCCTGTG	TTCGTGCTGG	GGATCATCGG	GAACTCCACA	600
30		CTTCTGAGAA	TTATCTACAA	GAACAAGTGC	ATGCGAAACG	GTCCCAATAT	CTTGATCGCC	660
		AGCTTGGCTC	TGGAGAGCTT	GCTGCACATC	GTCATTGACA	TCCCTATCAA	TGCTCAAG	720
		CTGCTGGCAG	AGGACTGGCC	ATTGGAGCT	GAGATGTGTA	AGCTGGTGCC	TTTCATACAG	780
		AAAGCCCTCG	TGGGAATCAC	TGTCGTGAGT	CTATGTGCTC	TGAGTATTGA	CAGATATCGA	840
		GCTGTGCTCT	CTTGGAGTAG	AATTAAAGGA	ATTGGGGTTC	CAAAATGGAC	AGCAGTAGAA	900
35		ATTGTTTTGA	TTTGGGTGGT	CTCTGTGGTT	CTGGCTGTCC	CTGAAGCCAT	AGGTTTTGAT	960
		ATAATTACGA	TGGACTACAA	AGGAAGTTAT	CTGCGAATCT	GCTTGCTTCA	TCCCGTTCAG	1020
		AAGACAGCTT	TCATGTCAGT	TTACAAGACA	GCAAAAGATT	GGTGGCTGTT	CAGTTTCTAT	1080
		TTCTGCTTGC	CATGGCCAT	CAGTGCATT	TTTTATACAC	TAATGACCTG	TGAAATGTTG	1140
		AGAAAGAAAA	TGGCATGCA	GATTGCTTTA	AATGATCACC	TAAAGCAGAG	ACGGGAAGTG	1200
40		GCCAAAACCG	TCCTTTGCTT	GGTCCCTTGC	TTTGCCTCT	GCTGGCTTCC	CCTTCACTC	1260
		AGCAGGATTC	TGAAGCTCAC	TCCTTATTA	CAGAATGATC	CCAATAGATG	TGAACCTTTG	1320
		AGCTTTCTGT	TGGTATTGGA	CTATATTGGT	ATCAACATGG	CTTCACTGAA	TTCCTGCAAT	1380
		AACCCAAATG	CTCTGTATTT	GGTGAGCAAA	AGATTCAAAA	ACTGCTTTAA	GTCTATGCTTA	1440
		TGCTGCTGGT	GCCAGTCATT	TGAAGAAAAA	CAGTCCCTGG	AGGAAAAGCA	GTCTGCTTTA	1500
45		AAGTTCAAAG	CTAATGATCA	CGGATATGAC	AACCTCCGTT	CCAGTAATAA	ATACAGCTCA	1560
		TCCTGAAGA	AGAACTATT	ACTGTATTTT	ATTTTCTTTA	TATGGACCG	AGTCATTAA	1620
		AACAAATATTA	AACATTGGCC	AAAAAACAAC	AAAAAACTAT	GTATTTGAC	AGCACACTAT	1680
		TAAATATTA	AGTGTAAATTA	TTTTAACACT	CACAGCTACA	TATGACATTT	TATGAGCTGT	1740
		TTACGGCATG	GAAAGAAAAT	CAGTGGGAAT	TAAAGAAAGCC	TGCTCGTGAA	AGCACTTAAT	1800
50		TTTTTACACT	TAGCACTTCA	ACATAGCTCT	TAAACAACCTC	CAGGATATTC	ACACAACACT	1860
		TAGGCTTAAA	AATGAGCTCA	CTCAGAAATT	CTATTCCTTC	TAAAGAGAGA	TTTATTTTAA	1920
		AATCAATGGG	ACTCTGATAT	AAAGGAAGAA	TAAGTCACTG	TAAACAGAAA	CTTTTAAATG	1980
		AAGCTTAAAT	TACTCAATTT	AAAATTTTAA	AATCCTTTAA	AACAACCTTT	CAATTAATAT	2040
		TATCACACTA	TTATCAGATT	GTAATTAGAT	GCAAAATGAGA	GAGCAGTTTA	GTTGTTGCAT	2100
55		TTTTCGGACA	CTGAAACAT	TAAATGATC	AGGAGGGAGT	AACAGAAAGA	GCAAGGCTGT	2160
		TTTTGAAAT	CATTACACTT	TCACTAGAAG	CCCAAACTCT	AGCATTCTGC	AATATGTAA	2220
		CAACATGCTA	CAACAGACA	GCAATGTAACA	GACTGACACA	TGTGCCAGT	GAATTTAAAA	2280
		TATAATACTT	TTAAAGAAAG	AATATTATCA	TCCTTTACAT	TCAGTTAAGA	TCAACCTTCA	2340
		CAAAGAGAAA	TAGAAATGTT	GAAAGGCTAT	CCCAAAAGAC	TTTTTTGAAT	CTGTCATTCA	2400
		CATACCTCTG	GAAGACAATA	CTATCTACAA	TTTTTTCAGG	ATTATTAAAA	TCTTCTTTTT	2460
60		TCACTATCGT	AGCTTAAACT	CTGTTTGGTT	TTGTCACTCG	TAAATACTTA	CCTACATACA	2520
		CTGCATGTAG	ATGATTAAT	GAGGCGAGGC	CCTGTGCTCA	TAGCTTTACG	ATGGAGAGAT	2580
		GCCAGTGACC	TCATAATAAA	GACTGTGAAC	TGCTGTGTGC	AGTGTCCACA	TGACAAAGGG	2640
		GCAGGTAGCA	CCCTCTCTCA	CCCATGCTGT	GGTTAAATG	GTTTCTAGCA	TATGTATAAT	2700
65		GCTATAGTTA	AAATACTATT	TTTCAAAATC	ATACAGATTA	GTACATTTAA	CAGCTACCTG	2760
		TAAAGCTTAT	TACTAATTTT	TGTATTATTT	TTGTAAATAG	CCAATAGAAA	AGTTTGTCTG	2820
		ACATGGTGCT	TTCTTTTCAT	CTAGAGGCAA	AACGTCTTTT	TGAGACCGTA	AGAACCTCTT	2880
		AGCTTTGTGC	GTTCTGCTCT	AATTTTATA	TCTTCTAAGC	AAAGTGCTTT	AGGATAGCTT	2940
		GGGATGAGAT	GTGTGTGAAA	GTATGTACAA	GAGAAAAACG	AAGAGAGAGG	AAATGAGGTG	3000
70		GGGTGGGAG	AAAACCAATG	GGACAGATTC	CCATTCTTAG	CCTAACGTTT	GTCAATGCTT	3060
		CGTCACACTA	ATGCAAAAGG	TCTGTATTTT	GTTCCAGCAA	AACACAGTGC	AATGTTCTCA	3120
		GAGTGACTTT	CGAAATAAAT	TGGGCCCAAG	AGCTTTAACT	CGGTCTTAAA	ATATGCCCAA	3180
		ATTTTACTTT	TGTTTTTCTT	TAAATAGGCT	GGGCCACATG	TTGAAATAAA	GCTAGTAATG	3240
		TGTTTTCTG	TCAATATTGA	ATGTGATGGT	ACAGTAAACC	AAACCCCAAC	AATGTGGCCA	3300
75		GAAAGAAAGA	GCAATATAAA	TTAATTACAA	CACCATATGG	ATTCTATTTA	TAAATCACCC	3360
		ACAAACTTGT	TCTTAAATTT	CATCCCAATC	ACTTTTTCAG	AGGCCCTGTTA	TCATAGAAAT	3420
		CATTTTAGAC	TCTCAATTTT	AAATTAATTT	TGAATCACTA	ATATTTTCA	AGTTTATTAA	3480
		TATATTTAAT	TTCTATTATA	ATTTTAGATT	ATTTTATTAA	CCATGTACTG	AATTTTATCA	3540
		TCCTGATACG	TCTTCTCTCT	CCATGTCACT	ATCATGTTCT	CTAATTATCT	TGCCAAATTT	3600
80		TGAAACTACA	CACAAAAGC	ATACTTGCA	TATTTATAAT	AAAATTGCA	TCAGTGGCTT	3660
		TTTAAAAAAA	ATGTTTGATT	CAAAACCTTA	ACATACTGAT	AAGTAAGAAA	CAATTATAAT	3720
		TTCTTTACAT	ACTCAAAACC	AAGATAGAAA	AAGGTGCTAT	CGTTCAACTT	CAAAACATGT	3780
		TTCTGTATAT	TAAAGACTTT	AATATAGCAA	CAGACAAAAT	TATTTGTTAA	ATGGATGTTA	3840
		CAGCTCAAAA	GATTTATAAA	AGATTTTAAC	CTATTTTCTC	CCTATTATTC	CAGTGTCTAAT	3900
		GTGGATGTAT	GTTCAAAAC	CTTTTAGTAT	TGATAGCTTA	CATATGGCCA	AAGGAATACA	3960

5  
 GTTTATAGCA AAACATGGGT ATGCTGTAGC TAACCTTTATA AAAGTGTAAAT ATAACATATGT 4020  
 AAAAAATTAT ATATCTGGGA GGATTTTTTG GTTGCTTAAA GTGGCTATAG TTACTGATTT 4080  
 TTTATTATGT AAGCAAAACC AATAAAAAAT TAAGTTTTTT TAACAACTAC CTTATTTTTC 4140  
 ACTGTACAGA CACTAATTCA TTAATACTA ATTGATTGTT TAAAGAGAAAT ATAAATGTGA 4200  
 CAAGTGACA TTATTATGT TAAATATACA ATTATCAAGC AAGTATGAAG TTATTCAATT 4260  
 AAAATGCCAC ATTTCTGTC TCTGGG

**Protein sequence 6**

10  
 Gene name: endothelin receptor type B  
 Unigene number: Hs.82002  
 Protein Accession #: NP\_000106  
 Signal sequence: 1-27  
 Pfam domain: 7tm\_1 [118-386]  
 Transmembrane domains: 100-122, 138-160, 173-195, 221-243, 277-299, 325-347, 358-380  
 Cellular Localization: plasma membrane

15  
 1 11 21 31 41 51  
 MQPPPSLCGR ALVALVLACG LSRINGEERG FPPDRATPLL QTASIMTPPT KTLNPKGSNA 60  
 SLARSLAPAE VPKGDRTAGS PPRITSPFPC QOPIEKETP KYINTVVSCL VFVLGIIGNS 120  
 20 TLLRIIYQNK QMRNWFNLI ASLALGDLH IVIDIPINVY KLLAEDWPPG AEMCKLVFPI 180  
 QKASVGIIVL SLCALSIDRY RAVASWSRIK GIGVPTGTAV EIVLIWVSV VLAPEAIGF 240  
 DIITWDYKGS YLRICLLHPV QKTAPMQFYK TAKDWWLFSP YFCLPLAITA PFYTLMTCEM 300  
 LRKKSQMGIA LNDHLKQRR VAKTVFCLVL VFALCWLPLH LSRILKLTLY QNDPNNRCEL 360  
 25 LSFLVLVDYI GINMASLNSC INFIALYLVN KRFKNCFKSC LCCWCQSFEK QSLBEKQSC 420  
 LKFKANDHGY DNRFRSSNKYS SS

**DNA sequence 7**

30  
 Gene name: G protein-coupled receptor 34  
 Unigene number: Hs.29202  
 Probeset Accession #: N54926  
 Nucleic Acid Accession #: AF039686  
 Coding sequence: 79-1224

35  
 1 11 21 31 41 51  
 AAAAACTGA AGACATAAGA ACTACACATG AGGAATATGT CATTAGCAC TTTCACITTT 60  
 TGATCTCCAC AGAAGACAAT GAGAAGTCAT ACCATAACAA TGACGACAC TTTCAGTCAGC 120  
 AGCTGGCCTT ACTCTCCCA CAGAATGCGC TTTATAACCA ATCATAGCGA CCAACCGCCA 180  
 40 CAAAACITCT CAGCAACACC AAATGTTACT ACCTGTCCCA TGGATGAAA ATTGCTATCT 240  
 ACTGTGTAA CCACATCCTA CTCGTATTAT TTCATGCTGG GACTGGTGG GAACATAATC 300  
 GCCTCTATG TATTCTCTGG TATTACCGT AAAAGAAATT CCATTCAAAT TTATCTACTT 360  
 AACGTAGCCA TTGCAGACCT CCTACTCATC TTCTGCCTCC CTTTCCGAAT CATGTATCAT 420  
 ATTAACCAAA ACAAGTGGAC ACTAGGTGTG ATTCTGTGCA AGGTTGTGG AACACTGTTT 480  
 TATATGAACA TGTACATTAG CATTATTTTG CTTGGATTCA TCAGTTTGG TCGCTATATA 540  
 45 AAAATTAAATC GGTCTATACA GCAACGGAAG GCAATAACAA CCAACAAAG TATTTATGTC 600  
 TGTGTATAG TATGGATGGT TGCTCTGTGT GATATCCTAA CTATGATTAT TTTAACACTT 660  
 AAGAAAGGAG GGCATAATTC CACAATGTGT TTCCATTACA GAGATAAGCA TAACGCAAAA 720  
 GGAGAAGCCA TTTTAACTT CATCTCTGTG GTAATGTTCT GGCTAATTTT CTTACTAATA 780  
 ATCCTTTTAT ATATTAAGAT TGGGAAGAAT CTATTGAGGA TTTCTAAAG GAGGTCAAAA 840  
 50 TTTCTAATTT CTGTGTAATA TGCCACTACA GCTCGTAAC CTTTATTGT ACTTATCATT 900  
 TTTACTATAT GTTTTGTTC CTATCATGCC TTTCGATTCA TCTACATTTC TTCCAGCTTA 960  
 AATGTATCAT CTGCTACTG GAAAGAAATT GTTCACAAA CCAATGAGAT CATGCTGGTT 1020  
 CTCTCATCTT TCAATAGTGT CTTAGATCCA GTCATGTATT TCCTGATGTC CAGTAACATT 1080  
 CGCAAAATTA TGTGCCAAT TCTTTTGA GAATTTCAAG GTGAACCAAG TAGGAGTGAA 1140  
 55 AGCACTTCAG AATTAAACC AGGATACTCC CTGCATGATA CATCTGTGCG AGTGAAAAAT 1200  
 CAGTCTAGTT TGAAGAAGTAC TTGAGGTAAA CATACTAAAA TGAATTATAT AATGAGCCT 1260  
 CTTAATCTTT TGAAGAAGTAAA AATTAATAGG AAACAAAGTT CTAGCATTTA CAAAACCTAG 1320  
 ATCTCAAGC TCTGCTGTA TTTGTGATAT TTCATTGTCT TAACGTGAAA CCAT

**Protein sequence 7**

60  
 Gene name: G protein-coupled receptor 34  
 Unigene number: Hs.29202  
 Protein Accession #: AAD50531  
 Signal sequence: none found  
 Pfam domain: 7tm\_1 [71-327]  
 Transmembrane domains: 90-112, 126-148, 171-193, 217-239, 263-285  
 Cellular Localization: plasma membrane

65  
 1 11 21 31 41 51  
 MRSHTITMT TSVSSWPYSS HRMRPITNHS DQPPQNFSAT PNVITCPMDE KLLSTVLTTT 60  
 YSVIFIQVLV GNIALYVFL GIHRKRNSIQ IYLLNVAIAD LLLIFCLFPR IMYHINQNK 120  
 70 TLGVILCKVV GTLPYMMYI SIILLGFISL DRYIKINRSI QQRKAITTKQ SIYVCCIVWM 180  
 VALGGFLTMI ILTLKKGHN STMCFHYRDK HNAKGEAIFN FILVVMFWLI FLLIILSYIK 240  
 IGKNNLRISK RSRFPNSGK YATTARNSFI VLIIFTICFV PYHAFRPIYI SSQNLVSSCY 300  
 75 WKEIVHKTNE IMLVLSFNS CLDPVMYPLM SSNIRKIMCQ LLFRFPQGEF SRSESTSEPK 360  
 PGVSLHDTSV AVKIQSSSKS T

**DNA SEQUENCE 8**

80  
 Gene name: exostoses (multiple)-like 2  
 Unigene number: Hs.61152  
 Nucleic Acid Accession #: NM\_001439  
 Coding sequence: 288-1280

1 11 21 31 41 51  
 CACTTTGCGG GCGGCACTTT TTCCAGGTTG TTAATCCAGC TAATGGAGAA GGATAGATGC 60

5  
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ACGCTACTTG GTTTAGAAAA AAAAAACAAA ATGAGCAAAC GAGACGCCCC TTCGTTTTTA 120  
TGATAACTAA GCTGCAGGGA AATAAATCGG CTGGCCCTAC TGCAATCTAC TGCACTCGAG 180  
AAACATCACA GAAATTTCTT TGATTATCT TAATAGTGAC AAGTGAGCCT GCTTCTGTCA 240  
ATTACTGAG CTATAAGGAG ATTTTTTAAA AATTAACCTT CAACACAATG AGGTGTTGCC 300  
ACATCTGCAA ACTTCTGGG AGAGTAATGG GGATTGAGT GCTTCGATTA TCTTTGGTGG 360  
TCATCTCTGT ATTATTACTG GTAGCTGGTG CTTTGACTGC CTTACTTCCC AGTGTAAAG 420  
AAGACAGAT GCTCATGTTG CGTAGGGAAG TAAAATCCCA GGGCAAGTCC ACCATGGAAT 480  
CCTTTACTCT CATAATGCAG ACGTACAAAC GAACAGATCT CTTATTGAAA CTTTAAATC 540  
ATTATCAGG TGACCAAAAT CTGCACAAAG TGATTGTGGT ATGGAACAAT ATTGGAGAGA 600  
AGGCACCAAG TGAATTTAGG AATTCTCTAG GGCCCCACCC TATCCCTGTG ATCTTCAAAC 660  
AACACAGAGC AAACAGGATG AGAAATCGAC TCCAGGTCTT TCCTGAACTG GAAACCAATG 720  
CAGTGTGAT GGTAGATGAT GACACACTCA TCAGCACCCC AGACCTTGTG TTTGCTTCT 780  
CAGTTTGACA GCAATTTCTT GATCAAATTG TAGGATTGTG TCCTAGAAGG CAOGTCTCTA 840  
CTTCATCAGG TATCTACAGT TATGGAAGTT TTGAAATGCA AGCACCCAGG TCTGGAATG 900  
GTGACCAGTA CTCTATGGTG CTGATTGGAG CCTCATCTT CAATAGCAAA TATCTTGAAT 960  
TATTTGAGAG GCAACCTGCA GCTGTCCATG CTTTGATAGA TGATACTCAA AACTGTGATG 1020  
ATATTGCCAT GAATTTTATC ATTGCCAAGC ATATTGGCAA GACTTCAGGG ATATTGTGA 1080  
AGCCTGTAAA CATGGCAAT TTGGAATAAG AAACCAACAG TGGCTATTCT GGAATGTGGC 1140  
ATCGAGCTGC GCACGCTCTG CAGAGGTCTT ATTGTATAAA TAAGCTTGTG AATATCTATG 1200  
ATAGCATGCC CTAAAGATAC TCCAACATTA TGATTCCCA GTTTGGTTTT CCATATGCCA 1260  
ACTACAAAAG AAAAATATAA AAGTAAACA AACAAAAACA AACCTGAAA CTGCTTGGCA 1320  
TTTGTAGAGC TTCTCCATGC TATGTATTIT TTTAAGCAAC ATCATGAAT TTATCTACTC 1380  
CAGAAGTCTC TACAAATAGAA AAAAAGTGC AGTGCTTCTA GGATATAAAA TTCACATTAC 1440  
TTTGAAGAGC CAAGAAGTGG GTCTTATCCA GTTAGGTCTT CTTATGAAGA GTTTTCATCC 1500  
AGGATATATA CTCTTGGTC AGTGATTITA TTGTTTACAT CCGAGAGCTG TTCTACAGTT 1560  
TCTTTGACTC CTGGCATTTG CCTTAAGGAC CTATAGCAAG CTGTTCTAG GATCAGAAAC 1620  
TCAAGAGAGC CATTTCTCTG CTTTTTCACT AAAGGTCAAT TGTTTTAAT TTGAACCTGA 1680  
AATGCCCTCT TAGCAAGCC TGTGGTATGG GGTAAAGCCA TGTAAAGA GAATAGTCTC 1740  
AGTCACATAT GAAGAGGAAA ATTTGCAGCT GCCAGTGCTT TCCTTGTGGC CCGTCCAAAC 1800  
AGCTCTTCCA GGACGAAGTC AGTCCAGCAT GGTTTTGATG TAAACATCCA TGCTTTTATT 1860  
TTTGTAGAGC TTCTTGTGAC TGGGACAGTT AATTTAGTA GCTGAAGAAC GTCTAGTTGT 1920  
TTGCTTGATA TTTGTGAACA TTTACTGCAT GGATCACAAC ACAATATACC CTGTATTCT 1980  
TACAGCCAC TTATATGCAG CAAGGAGTAA ATGTGTACT AGATTCCGGT AGTGCAATTT 2040  
GTCACTGAAT CTGACCTTGA GAATGTACAT TAATCTTAT ATTTTACATA ATGTATGTGT 2100  
TGTTTAAAGAA ATGTATAAAA AACCTGAAA AAATGAGTAA GAACCTGGAG AAGTTAAAC 2160  
GCTTTGTATC AAAAGATCTT TATTGGTAGA GCACTGGTTA TCTTCTGGAT ACTAAAAAGT 2220  
TGATATACAA AGCCAAACAC TTGCATTAC AACITTAATAA AAGATCCAA GGAACTATT 2280  
ATAATGATGA GTTTTCAACT ACATACAAG AGGAGAAAAT AAGAACCAG TCATAACAGA 2340  
GGAATCTAT AGGAGTCTGC ATCAATTCAT TCTTAAGGTT GCCTACTCTC TGTTATGTGA 2400  
ATTAGCTCT GTGTTTCAAC CATGTCTGT GTTTAGTCTT TGTTCACCAC TAAGGCAAGG 2460  
AATCTTAAC TAGGCTCTG TTTACCAACT TCTCTTCTC CTCTTTTCCC TCTTATTCT 2520  
CCTCTCTCT TCTCTCTTA TATAATGCTA GTATATTCTC AAAATTGCAA AGCTGTGAGA 2580  
ATATTAAAAA AATCATGGCT AATGTTCCAA TAATGAGTCT TTTGTGCATT TAGTCCGCA 2640  
TATGATGGT TTTTTTTAC ATTAAGAGT ATATGTGTCT TAATGCAGTC AGATTGTAAA 2700  
AAACAAAAAC AAAGAACTA AGAATCTTAC TAAAAATGCA TAATGTCTAG TATCTGTTT 2760  
GTCCAAATAT GTCTAGTACT TTTGCTCTCT TATGATCTCT CTAGCAGATA AATAAAGAA 2820  
ACTTTTCCA TCC

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60  
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Protein sequence 8  
Gene name: exostoses (multiple)-like 2  
Unigene number: Hs.61152  
Protein Accession #: NP\_001430  
Signal sequence: 1-38  
Transmembrane domains: none found  
Cellular Localization: plasma membrane

1 11 21 31 41 51  
MRCCHICKLP GRVMGIRVLR LSLVVLVLL LVAGALTALL PSVKEDKMLM LRRBIKSQSK 60  
STMSPTLIM QTYNRDLLLL KLNHYQAVP NLHKVIVVWN NIGEKAPDEL WNSLGFPHIP 120  
VEFKQQTANR MRNRLOVFE LETNAVLMVD DDLISTPDL VFASFVWQF PDQIVGFVPR 180  
KRVSTSSQIV SYGSEFMQAP GSGNGDQYSM VLIASFPNS KYLELFQRP AAVHALIDDT 240  
QNCDDIAMNF IIAKHIGKTS GIPVKPVNMD NLEKETNSQY SQMWHRAEHA LQRSYCINKL 300  
VNIYDSMPLR YSNIMISQFG FPYANYKRKI

70  
75  
80

DNA SEQUENCE 9  
Gene name: Homo sapiens growth differentiation factor 1 (GDF1)  
Unigene number: Hs.92614  
Probeset Accession #: AL120193  
Nucleic Acid Accession #: NM\_021267  
Coding sequence: 73-1125

1 11 21 31 41 51  
ACGCGGGGCG CGGGCTCCG TCGGCTACCG CGGGCGGGCG CAGGCGACGG GCACGGCGGG 60  
CGAGCGGGCG GTATGGCGGC GCGGGGGCCC GCGGGCGGGC CGAGCCCATG 120  
CGAGCTACG CGCAGCTAGT GCAGCGCGGC TGGGCGAGCG CGCTGGCGGC GCGCGGGGGC 180  
TGCACGGACT CGGGCTGGGG GCTGGCGCGT CGCGGCTGG CTGAGCACGC CCACTTGGCG 240  
CGGCGGAGC TGCTGCTGCT GCGCTCGGC GCGCTGGCT GGACCGCGCT CGCTCCGCG 300  
GCCACTGCGC GCCTCTTTCG GCGGCTGGCG AAGCGGTGCT GCCTCCAGC CAGAGATGCC 360  
GCCAAGATGC CCGAGAGCGC TTGGAAGTTT CTCTCTTACC TGGGCGAGTG GAGCTACAGT 420  
GCTTACCTGC TGTGTCGAC CCACTACCCC TTCTTCCATG ACCCACCATC TGTCTCTAC 480  
GACTGACGCG CGGCGATGCG AGTGCCACGG GACATTGCG CCGCTTACCT GCTCCAGGGA 540  
AGCTTCTATG GCCACTCCAT CTACGCTACG CTATACATGG ACACCTGGCG CAAGGACTCG 600  
GTGGTCATGC TGCTCCACCA CGTGGTCACT CTCATCTCA TCGTCTCTC CTACGCTTC 660  
CGSTACCACA ATGTGGGCAT CCTGTGCTC TTCTGCGAC ATATCAGTGA CGTGCAGCTT 720



5 GAGTTCACCA AGCTCAACAT TTAATTCAAG TCCGCGGGCG GCTCCTACCA TCGGCTGCAT 780  
 GCCTTGGCAG CAGACTTGGG CTGCTCAGC TTGCGCTTCA GCTGGTTCG GTTCCGCTC 840  
 TACTGGTTC CACTCAAGGT CCGTATGCC ACCAGTCACT GCAGTCTGG CACGGTGCCT 900  
 GACATCCCT TCTACTCTT CTCAATGCG CTCCTGCTGC TGCTCACCCT TATGAACCTC 960  
 TACTGGTTC TGTACATCGT GCGSTTTGCA GCCAAGGTGT TGACAGGCCA GGTGCACGAG 1020  
 CTGAAGGACC TGCGGAGTA TGACACAGCC GAGGCCAGG GCCTGAAGCC CAGCAAAGCC 1080  
 GAGAAGCCAC TGAGGAACGG CCGTGTGAAG GACAAGCGCT TCTGAACCCC TCGGCCCGCC 1140  
 CCGCTGGAC CCGGCCCCAC CCGAATACC CCGCCACGCG TCCCGTCTCT TCGGCCCGCC 1200  
 TCCACCCCT CCAACTCTGC TCTCTAGGG CCGCCCGCAC CTCCCTGGG ACCCGGCCCC 1260  
 CTCTCTCTG CTCCATTTC CCGCCACGCC CCGCAGGACC CCGGCCCTC CCGGACACCC 1320  
 GCGCCCGCCC TCAGCCCACT GGTCCCGGC CCGCGCGAC CCGCGCACT CTCTGTCTAT 1380  
 CGCTTGGAG GAGATGCCA CCGCGCAGC AAGTCCCTG CCGCCACCA CTCTCTCTCC 1440  
 TCCTGGCCCT GCTCTGCCC TCGCTGCCCC TGACCGCGCG CCGCGTGCCT CCGGCCCGAG 1500  
 CCGCCCGCT CTCCAGGCT CTAGGACTGC GCGATGAGCC CCGGGTGCCT CCGAGGCTCC 1560  
 GCGCGGTTCC CCGGCTCATG TGGCGCTGT TTGAGCGCG GAGCCCGCAG GAGACAGGT 1620  
 CTGGCTCGCG GCGGAOGTCC CCGGGGTCA CCGTCAACC GTGCCACGT GAGGAGCTGG 1680  
 GGGTCCCGCG AAACATGCTG CCGCACATCC CGSACCGCG TGCGCCCACT CCGGCCCTCG 1740  
 AGCTGTCTC GCGCGCGGG CATTCGCCGT AGTGACAGT CGTCTTGCAG CTGTGGCTG 1800  
 TGGAACCCGC TGAGCCCGG AGCCGGGCC GCTTGAGCT CGCTTTCGCG CCGCGCGCG 1860  
 CCGCAGCCCC GAGGGCGCG TGGAAGCTGA GCGTGGCGCA AGCGGGCCAG GCGCGCGCG 1920  
 CGGACCCCG GCGGTGCTG CTCCGCCAGT TGGTCCCGC CCGGGGCCG CCGGTGCGCG 1980  
 CCGAGCTGCT GCGCGCGCT TGGGCTGCG ACOCCTCATG GCGCGCGCG CTCCGCTGCG 2040  
 CGCTGGCGCT ACOCGCCCG GCGGCTGCG CCGCGCGCG CCGGTGCGCG GCGTGTGCTG 2100  
 25 TGCTGGTGAC CCGTCAACCG CCGCTGTGCC ACCCCTGCG CCGCGCGCG CCGGACCGCG 2160  
 AACCCGTGT GCGCGCGCG CCGCGCGCG CTGTGCGCG CCGCGCGCG TACGTGAGCT 2220  
 TCCCGCAGGT GCGCTGGCAC CCGTGGTCA TCGCGCGCG CCGCTTCTGT GCCAATCTAT 2280  
 GCGAGGTCFA GTGCGCGCTG CCGTCCCGC TGTGCGGCTG CCGGGGCCG CCGCGCTCA 2340  
 ACCACGCTGT GCTGCGCGCG CTCTGCACG CCGCGCGCG GCGAGCGCG GAGCTGCCCT 2400  
 30 GCTGCGTGC CCGCGCGCTG TCGCCCATCT CCGTGTCTT CTTTGACAC AGCGACAACG 2460  
 TGGTGTGCG GCAGTATGAG GACATGGTG TGGACGAGTG CCGCTCGCG TAACCGGGG

## Protein sequence 9

Gene name: Homo sapiens growth differentiation factor 1 (GDF1)

Unigene number: Hs.92614

Protein Accession #: NP\_067090

Signal sequence: none found

Transmembrane domains: 106-128, 148-169, 184-206, 244-266, 285-307

Cellular Localization: plasma membrane

40 1 11 21 31 41 51  
 MAAAGPAAGP TGPEPMPSYA QLVQRWWSA LAAARGCTDC GWGLARRGLA EHAHLAPPEL 60  
 LLLALGALGW TALRSAATAR LFRPLAKRCC LQPRDAAKMP ESANKPLFYL GSWSYSAAYLL 120  
 FGTDYPPFHD PPSVFPDWTG GMVAPRDIAA AYLLQGSFYG HSIYATLYND TWRKDSVVM 180  
 LKHVVTLILI VSSYAFRYHN VGILVLPDHD ISDVQLEPTK LNIYFKSRGG SYHRLHALAA 240  
 45 DLGLCSFGFS WFWFLRYWFP LKVLVATSHC SLRTVPDIPF YFFFNALLLL LTLNLYWFL 300  
 VIVFAAKVL TQVHLEKDL REYDTAEQAS LKPSKAEEKPL RNGLVKDKRF

## DNA SEQUENCE 10

Gene name: epidermal growth factor receptor (avian erythroblastic leukemia)

Unigene number: Hs.77432

Nucleic Acid Accession #: NM\_005228

Coding sequence: 187-3819

55 1 11 21 31 41 51  
 GCGCGCTGCG GCGCGAGTCC CGAGCTAGCC CCGCGCGCCG CCGCGCCAG ACCGAGCGAC 60  
 AGGCCACCTC GTGCGGTCC CCGCGAGTCC CCGCGTGGCC GCCAAGGCCA CAACACCCG 120  
 GCACGGCCCC CTGACTCCGT CCAATATGTA TCGGGAGAGC CCGAGCGAGC TCTTCGGGA 180  
 GCAGCGATGC GACCTCCGG GACGCGCGGG GCAGCGCTCC TGGCGCTGCT GGCTGCGCTC 240  
 TGCCCGCGGA GTGCGGTCT GAGGAAAGG AAGTTTGCC AAGGCACGAG TAACAAGCTC 300  
 60 AGGCAGTTGG GCACTTTGA AGATCATTT CTGAGCTCC AGAGGATGT CAATAACTGT 360  
 TGAAGATGCC TTGGGAATT GGAATTACC TATGTGCGA GGAATTATG TCTTCTCTC 420  
 TTAAGACCA TCCAGGAGGT GGCTGTTAT GTCTCATTC CCGTCAACAC AGTGGAGCGA 480  
 ATTCTTTGG AAAACCTGCA GATCATCAGA GGAATATGT ACTACGAAA TCTCATGCC 540  
 65 TTAGCAGTCT TATCTAATA TGATGCAAT AAAACCGAC TGAAGAGCT GCCCATGAGA 600  
 AATTACAGG AATCTGCA TGGCGCGGTG CCGTTCAGCA ACAACCTGCG CCGTGTCAAC 660  
 GTGGAGAGCA TCCAGTGGCG GGACATAGTC AGCAGTGAAT TTCTCAGCA CATGTGATG 720  
 GACTTCCAGA ACCACCTGG CAGCTGCCAA AAGTGTGATC CAAGCTGTCC CAATGGGAGC 780  
 TGCTGGGGTG CAGGAGAGGA GAATGCCAG AACTGACCA AATCATCTG TGCCAGCAG 840  
 70 TGCTCCGGCC GCTGCGTGG CAAGTCCCC AGTGACTGCT GCCACAACCA GTGTGTGCA 900  
 GGCTGCACAG GCGCCCGGGA GAGCGACTGC CTGGTCTGCC GCAATTCGG AGACGAGCC 960  
 ACGTGCAAGG ACACCTGCC CCACTCATG CTCTACAACC CCACCACTA CAGATGGAT 1020  
 GTGAACCCCG AGGGCAATA CAGCTTTGGT GCCACTGCG TGAAGAAGTG TCCCGTAAT 1080  
 TATGTGGTGA CAGATCAGG CTGCTGCTG CAGCGCTGTG GCGCGGACAG CTATGAGATG 1140  
 75 GAGGAAGACG GCGTCCGCA GTGTAAAGG TGCAGAGGCG CTTGCGGCAA AGTGTGTAA 1200  
 GGAATAGGTA TTGTTGAATT TAAAGACTCA CTCTCCATAA ATGCTACGAA TATTAAACAC 1260  
 TTCAAAGACT GCACCTCCAT CAGTGGCGAT CTCACATACC TGCCTGTGCG ATTTAGGGGT 1320  
 GACTCCTTCA CACATCTCC TCTCTGGAT CCACAGGAAC TGGATATTCT GAAACCGTA 1380  
 AAGGAAATCA CAGGTTTTT GCTGATTCAG GCTTGCCTG AAAACAGGAC GGAACCTCAT 1440  
 80 GCCTTTGAGA ACCTAGAAAT CATACGCGCG AGGACCAAGC AACATGGTCA GTTTCTCTT 1500  
 CAGTGTGCA CCGTGAACAT AACATCTTG GGATTACGCT CCGTCAAGGA GATAAGTGAT 1560  
 GGAGATGTGA TAATTTCAGG AAACAAAAT TTGTGCTATG CAAATACAAT AAATCGGAAA 1620  
 AAACGTTTTG GGAACCTCCG TCAGAAAACC AAAATTATAA GCAACAGAGG TGAACACAG 1680  
 TGCAAGGCCA CAGGCCAGGT CTGCCATGCC TTGTGCTCCC CCGAGGCGTG CTGGGCGCCG 1740  
 GAGCCACAGG ACTGCTCTC TTGCCGGAAT GTGAGCGGAG GCAGGGAATG CGTGGACAAG 1800

147

5 ALGIGLPMRR RHIVRKRTLR RLLQERELVE PLTPSGEAPH QALLRILKET EFKKIKVLGS 720  
 GAFGTIVYKGL WIPEGEKVKI PVAIKELREA TSPKANKEIL DEAYVHASVD NPHVCRLLGI 780  
 CLTSTVQLIT QLMPPGCLLD YVREHKDNIG SQYLLNMCVQ IAKGMNLYED RRLVHRDLAA 840  
 RNVLVKTPOH VKITDFGLAK LLGAEEKEYH AEGGKVPIMK MALESILHRI YTHQSDVNSY 900  
 GVTWELMTF GSKPYDGIPIA SEISSILEKG ERLPOPICT IDVYMIMVKC WMIDADSRPK 960  
 PRELIIIESK MARDPQRYLV IQCDERMHLF SPTDSNPFYRA LMDEEDMDUV VDADEYLIPQ 1020  
 QGFFSSPSTS RTVLLSSLSA TSNNSTVACI DRNGLQSCPI KEDSFLQRYB SDPTGALTED 1080  
 SIDDITFLVP EYINQSVPKR PAGSVQNFVY HNQPLNFPAP RDPHYQDPHS TAVGNPEYLN 1140  
 10 TVQPTCVNST FDSAPHWAK GSHQISLENP DYQDDFFPKK AKPNIGIFKGS TAENABEYLRV 1200  
 APQSSEFIGA

## DNA sequence 11

Gene name: claudin 5 (transmembrane protein deleted in velocardiiofacial syndrome)

Unigene number: Hs.110903

Probeset Accession #: AW245805

Nucleic Acid Accession #: NM\_003277

Coding sequence: 121-777

20 1 11 21 31 41 51  
 AGGGGACTGG GGCCAGAGC CGGGAGCGCG GGGCAAAAGG CACCAAGGGCC GGCCAGGGC 60  
 GCGGCGCAGC ACGGCTTGG GGGTTCTGG GGCCTTCGGG TGCGCGTCTC GCCTCTAGCC 120  
 ATGGGTCCCG CAGCGTTGGA GATCCTGGGC CTGGTGCTGT GCCTGTGTGG CTGGGGGGGT 180  
 25 GTGATCCTGG CGTGCGGGCT GCCCATGTGG CAGGTGACCG CCTTCTGTGA CCACAACATC 240  
 GTAGCGGGCG AGACCACTTG GAAGGGCCTG TGGATGTCTG GCGTGTGTGA GAGCACCGGG 300  
 CACATGCACT GCAAAAGTGA CGACTCGGTG CTGGCTCTGA GCACCGAGGT GCAGGCGGGG 360  
 CGGGCGCTCA CGGTGAGCGC CGTGCTGTCT GCGTTCGTTG CGCTCTCTGT GACCTGGGG 420  
 GGCGCGCAGT GCACCACTTG CGTGCGGGCG GCGCGGGCCA AGGCGGGTGT GGCCTCAAG 480  
 30 GGAGGCGTGG TCTACCTGTT TTGCGGGCTG CTGGCGCTCG TGCCACTCTG CTGTTTCGCC 540  
 AACATTGTGG TCGCGAGTGT TTACGACCCG TCTGTGCGCG TGTCGAGAA GTACGAGCTG 600  
 GCGCGAGCGC TGTACATCGG CTGGGCGGGC ACCGCGCTGC TCATGGTAGG CGGCTGCTCT 660  
 TTGTGCTGCG GCGCCTGGGT CTGCACCGCG CGTCCCGACC TCAGCTTCCC CGTGAAGTAC 720  
 TCAGCGCCCG GCGCGGCCAC GCGCACCGCG GACTAGGACA AGAAGAACTA CGTCTGAGGG 780  
 35 CGCTGGGCGC GCGCGGGCCC CTCTGCCAG CCACGCTCTG GAGGCGTTGG ATAAGCCTGG 840  
 GAGGCGCCCG ATGAGCCCGG GCTTCCGCGG GGTAGCGCGG CGCGCAGGCT CCTGGGAACG 900  
 TCCGGCTCTG GCGCGCGAGC CGGCTCCTGG ATCCGCTCCT GCCTGCGCCC GCGAGTGACC 960  
 TTCTCTCTGC ACTAGCCCGG CCCTGCCCTT AACAGACGGA ATGAAGTTTC CTTTTCTGTG 1020  
 CGCGGCGCTG TTTCATAGG CAGAGCGGGT GTCAGACTGA GGATTTCGCT TCCCTCCAA 1080  
 40 GAGCCTGGGG GTCTTGCTGT CTGCTTACT TCCCAGAGGC TCCTGTCTGAC TTCGGAGGGG 1140  
 CGGATGCGAG GCGCGGGGCC CCCACCGGAA GATGTGTACA GCTGGTCTTT ACTCCATCGG 1200  
 CAGGCGCGAG CCCAGGGACC AGTGACTTGG CCTGGACCTC CGGCTCTAC TCCAGCATCT 1260  
 CCCCAGGCAA GGCTTGTGGG CACCGGAGCT TGAGAGAGGG CGGGAGTGGG AAGGCTAAGA 1320  
 ATCTGCTTAG

## Protein sequence 11

Gene name: claudin 5 (transmembrane protein deleted in velocardiiofacial syndrome)

Unigene number: Hs.110903

Protein Accession #: NP\_003268

Signal sequence: none found

PFam domain: PMP22 Claudin [4-181]

Transmembrane domains: 5-27, 74-96, 123-145, 164-186

Cellular Localization: plasma membrane

55 1 11 21 31 41 51  
 MGSAALEILG LVLCLVWGSG LILACGLPMW QVTAFLDINI VTAQTWVGL WMSCVVQSTG 60  
 HMQCKVVDV LALSTEVQAA RALTVSAVLL AFVALFVTLA GAQCTTCVAP GPAPARVALT 120  
 GGVLYLFCGL LALVPLCWFA NIVVREFYDP SVFVSQKYEL GAALYIGWAA TALLMVGCGC 180  
 LCCGAWCTG RPDLSFPVKY SAPRRPTATG DYDKQNYV

## DNA sequence 12

Gene name: vascular endothelial junction-associated molecule

Unigene number: Hs.54650

Probeset Accession #: AA410345

Nucleic Acid Accession #: AF255910

Coding sequence: 241-1137

65 1 11 21 31 41 51  
 TTACCATGT GTTGGGCTGC GAGAAGACGA CAGAAGGGGG ACCCGCTCTT TGGCAGCCAG 60  
 70 CTGAGAAGGC GCCCGGGGA GGGGGAACAT GACATCCCAT CTAGAGCCGT CCCTCTCTT 120  
 CCTCCCTCC CGACTCTCTG CTCTTTTCCC GCCCAGAGG TTCAAGGGCC CCGGCGCTCC 180  
 TGCCTCTCTG CGCGCGGAC CCTCGACCTC CTCAGAGCAG CCGGCTCGCG CCGCGGGAAG 240  
 ATGGCGAGGA GAGAGCGCCA CCGCTCTCTC CTGCTGTGTC TGCGCTACCT GGTGGTGGCC 300  
 CTGGGCTATC ATAAGGCTTA TGGGTTTCTT GCCCAAAAG ACCAACAGGT AGTCACAGA 360  
 75 GTAGAGTACC AAGAGGCTAT TTAGCCTGCA AAAACCCCAA AGAAGACTGT TTCCTCCAGA 420  
 TTAGAGTGGG AGAACTGGG TCGGAGTGTC TCCTTTGTCT ACTATCAACA GACTCTTCAA 480  
 GGTGATTTTA AAAATCGAGC TGAGATGATA GATTTCAATA TCGGATCAA AAATGTGACA 540  
 AGAAGTGATG CGGGGAAATA TCGTGTGAA GTTAGTGGCC CATCTGAGCA AGGCCAAAC 600  
 CTGGAAGAGG ATACAGTCAC TCTGGAAGTA TTAGTGGCTC CAGCAGTTCC ATCATGTGAA 660  
 80 GTACCTCTCT CTGCTCTGAG TGGAACTGTG GTAGAGCTAC GATGTCAAGA CAAAGAAGGG 720  
 AATCCAGCTC CTGAATACAC ATGGTTTAAG GATGGCATCC GTTGTCTAGA AAATCCCAQA 780  
 CTGGCTCCC AAGACACCAA CAGCTCATAC ACAATGAATA CAAAACCTGG AACTCTGCAA 840  
 TTTAATACGA TTTCCAAACT GGACACTGGA GAATATTCTT GTGAAGCCCG CAATTCTGTT 900  
 GGTATCTGCA GTGTCTCTGG GAAACGAATG CAAGTAGATG ATCTCAACAT AAGTGGCATC 960  
 ATAGCAGCCG TAGTAGTTGT GGCTTAGTGT ATTTCCGTTT GTGGCTCTGG TGTATGCTAT 1020

5 GCTCAGAGGA AAGGCTACTT TTCAAAAGAA ACCTCCTTCC AGAAGAGTAA TTCTTCATCT 1080  
 AAAGCCACGA CAATGAGTGA AAATGATTTC AAGCACACAA AATCCTTTAT AATTATAGAA 1140  
 CTCCACTTTA GAGATACACC AAAGCCACCG TTGTTACACA AGTTATTAAA CTATTATAAA 1200  
 ACTCTGCTTT GTCCGACATT TGCAAGAGGG TACACGAGGA AATGGAATTG GTATTTCATT 1260  
 TTAATTTTCA TGACTACTAA CTCACCTGAA CTGTCTATT TAAAMAATA GTTCTGTGGA 1320  
 CACCTAAAT ATAATCTGGC TTCTTGTGTC TGGACTAAGT TAAAGAATT AAAATACTTT 1380  
 GTAATGTCAA AAAAAA

10 **Protein sequence 12**

Gene name: vascular endothelial junction-associated molecule

Unigene number: Hs.54650

Protein Accession #: AAF81223

Signal sequence: 1-22

15 IgC2 domain: 41-116, 146-221

Transmembrane domains: 239-261

Cellular Localization: plasma membrane

1 11 21 31 41 51  
 20 MARRSRHRL LLLRLYLVA LGYHKAYGFS APKDDQVVTA VBYOEAILAC KTFKKTSSR 60  
 LEMKLGKRSV SPVYQQTLQ GDFKNRAEMI DFNIRIKNVT RSDAGKYRCE VSAFSEQQGN 120  
 LEEDVTILEV LVAPAVPSCE VPSSALSGTV VELRCQDIKEG NPAPETWFK DQIRLLENPR 180  
 LGSQSTNSSY TMTKTGTGLQ FNTVSKLDTG EYSCEARNVS GYRRCFGRKM QVDDLNIISGI 240  
 IAAVVVALV ISVCGLVICY AQRKGYSKE TSFQKSNSSS KATTMSENDP KHTKSPFI

25 **DNA sequence 13**

Gene name: solute carrier family 11 (proton-coupled divalent metal ion

Unigene number: Hs.182611

Probeset Accession #: D50402

Nucleic Acid Accession #: NM\_000578

Coding sequence: 1-1653

1 11 21 31 41 51  
 35 ATGACAGGTG ACAAGGGTCC CCAAGGGCTA AGCGGGTCCA GCTATGGTTC CATCTCCAGC 60  
 CCGACACGCC CGACACGCC AGGGCCACAG CAAGCACCTC CCAGAGAGAC CTACCTGAGT 120  
 GAGAAGATCC CCATCCGAGA CACAAAACCG GGCACCTTCA GGCTGCGGAA GCTATGGGCC 180  
 TTCACGGGGC CTGGCTTCCT CATGAGCATT GCTTTCCTGG ACCCAGGAAA CATCGAGTCA 240  
 GATCTTCAGC TNGGNCNGT GCGGGGATTC AAACCTTCTCT GGTGTGCTGT CTGGGCCACC 300  
 GTGTGTGGCT TGCTCTGCCA GCGACTGGCT GCACGTCTGG GGTGTGTGCT AGGCAAGGAC 360  
 TTGGGCGAGG TCTGCCATCT CTACTACCTT AAGGTGCCCC GCACCTCTCT CTGGCTGACC 420  
 40 ATCGAGCTAG CCATTGTGGG CTCCGACATG CAGGAAGTCA TCGGCACGGC CATTCGATTC 480  
 AATCTGTCTT CAGCTGGAGG AATCCCACTC TGGGGTGGGG TCCTCATCAC CATCTGGGAC 540  
 ACCTTCTTCT TCCTCTTCTT CGATAACTAC GGGCTGCGGA AGCTGGAAGC TTTTITGGA 600  
 CTCCTTATTA CCATTATGGC CTGACCTTTT GGCTATGAGT ATGTGGTGGC GCGTCTGAG 660  
 45 CAGGGAGCGC TCTTCGGGG CCTGTTCCTG CCTGTGCTGC CGGGCTGCGG CCACCCCGAG 720  
 CTGTCTCAGG CGGTGGGCAT TGTGGCGGCC ATCATCATGC CCCACAACAT CTACCTGCAC 780  
 TCGGCCCTGG TCAAGTCTCG AGAGATAGAC CGGGCCCGCC GAGTGCACAT CAGAGAAGCC 840  
 AACATGTACT TCCTGATTGA GGCCACCATC GCGCTGTCCG TCTCTTTAT CATCAACCTC 900  
 TTGTCTATGG CTGCATTGG GCAGGCCTTC TACCAGAAA CCAAGCAGGC TGCCTTCAAC 960  
 50 ATCTGTGCCA ACAGCAGCCT CCACGACTAG GCTAAGATCT TCCCATGAA CAACGCCACC 1020  
 GTGGCCGTGG ACATTACCA GGGGGCGCTG ATCCTGGGCT GCTGTTCGG CCCCGGGGCC 1080  
 CTCTACATCT GGGCCATAGG TCTCCTGGCG GCTGGGCAGA GCTCCACCAT GAGCGGCACC 1140  
 TACGCGGAC AGTTCGTGAT GGAGGGCTTC CTGAGGCTGC GGTGTCAAG CTTCGCCCGT 1200  
 GTCTCTCTCA CCGCTCTCTG CGCCATCTTG CCCACGTCG TCGTGGCTGT CTTCGGGAC 1260  
 55 CTGAGGGACT TGTGGGGCT CAATGATCTG CTCACCGTGC TGCAGAGCCT GCTGTCCCG 1320  
 GTTGCCTGTC TGCCCATCCT CACGTTTACC AGCATGCCCA CCCTCATGCA GGAGTTTGGC 1380  
 AATGCCCTGC TGAACAAGGT CGTCACCTCT TCCTCATGAG TGCTAGTCTG CACCATCAAC 1440  
 CTCTACTTCT TGGTCAGCTA TCTGCCCGAG CTGCCCGACC CTGCCTACTT CGGCTTGCA 1500  
 GCCTTGTCTG CCGCAGCCTA CTTGGGCGCT AGCACCCTAC TGGTCTGGAC CTGTTGCCCT 1560  
 60 GCCCACGGAG CCACCTTTCT GGCCCAAGC TCCACCACC ACTTCTGTA TGGGCTCCTT 1620  
 GAAGAGGACC ACAAGGGGA GACCTCTGGC TAG

65 **Protein sequence 13**

Gene name: solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1

Unigene number: Hs.182611

Protein Accession #: NP\_000569

Signal sequence: none found

Pfam domain: Nrmpp [78-463]

Transmembrane domains: 58-80, 88-110, 159-181, 195-217, 284-306, 349-379, 394-416, 432-454, 468-490, 501-523

Cellular Localization: plasma membrane

1 11 21 31 41 51  
 70 MTGDKGPQRL SGSSYGSISS PTSPTSPGFG QAPPRETYLS EKIPIDTKP GTFRLRKLWA 60  
 FTGPGPLMSI AFLDPGNIES DLQLGFVAGF KLLWVLLNAT VLQLLCQRLA ARLGVVTGKD 120  
 75 LGEVCHLYYP KVPRTVLWLT IELAIVQSDM QEVIGTAIAP NLLSAGRIPL WGGVLITIVD 180  
 TPFFLPFLDNY GLRKLKAFPG LLITIMALT FGYEVVARPE QGALLRGLFL PSCPGCXHPE 240  
 LLQAVGVIGA IIMPENIYLH SALVKSREID RARRVDIREA NMYFLIETI ALSVSFIINL 300  
 FVMAAPGQAF YQKTKQAAPN ICANSLHDY AKIFPMNAT VAVDIYQGGV ILGCLFGPAA 360  
 LYIWAIGLLA AGQSTMTGT YAGQFVMEGF LRLRWSSPAR VLLTRSCAIL PTVLVAVPRD 420  
 80 LRDLSGLNDL LNVLSLLLP VAVLPILTFT SMPITLMQFA NGLLNKVTS SIMVLVCTIN 480  
 LYFVVSYLPS LPHPAYFGLA ALLAAAYLGL STYLWVTCL AHGATPLAHS SHHFLYGLL 540  
 EEDHKGSTSG

DNA sequence 14

Gene name: solute carrier family 7 (cationic amino acid transporter, y+

Unigene number: Hs.184601  
 Probeset Accession #: AF104032  
 Nucleic Acid Accession #: NM\_003486  
 Coding sequence: 53-1576

```

5 1      11      21      31      41      51
   |      |      |      |      |      |
GCTCGCTGGG COGCTGCTCC CGGCTGTCCC AGGCCCGGCC GGTGCGCAGA GCATGGCGGG 60
TGCGGGCCCG AAGCGGCGCG CGCTAGCGGC GCGCGCGGCC GAGGAGAAGG AAGAGGCGCG 120
GGAGAAGATG CTGCGCCGCA AGAGCGCGGA CGCTCGGCG CGCGCAGCGC AGGGCGAGGG 180
CGTGACCCTG CAGCGGAACA TCACGCTGCT CAACGCGGTG GCCATCATCG TGGGAGCCAT 240
TATCGGCTCG GGCATCTTCG TGACGCCAC GGGCGTCTC AAGGAGGCG GCTCGCGGG 300
GCTGGGCGTG GTGGTGTGGG CCGGTGGGG GGTCTTCTCC ATCGTGGCG CGCTCTGCTA 360
CGCGAGGCTC GGCACCAACA TCTCCAAATC GGGCGGCGAC TACGCTTACA TGCTGGAGGT 420
CTACGCTCG CTGCGCGCTT TCTTCAAGCT CTGGATCGAG CTGCTCATCA TCCGCGCTTC 480
ATCGCAGTAC ATCGTGGGCC TGGTCTTCGC CACCTACCTG CTCAGCGCG TCTTCCCGAC 540
TTCGCCGGTG CCGAGGAGGG CAGCCAGGCT CGTGGCGTGC CTGTGCGTGC TGCTGCTCAC 600
GGCGGTGAAC TCCTACAGCG TGAAGGCGCG CACCGGGTTC CAGGATGCTT TGGCGCGCG 660
CAAGCTCTCG GCCCTGGCCC TGATCATCTT GCTGGGCTTC GTCCAGATCG GAAAGGGTGA 720
TGTGTCCAAT CTAGATCCCA AGTTCTCATT TGAAGGCACC AAATCGGATG TGGGGAACAT 780
TGCTCTGGCA TTATACAGCG GCCTCTTTGC CTATGGAGGA TGGAATTACT TGAATTTCTG 840
CACAGAGGAA ATGATCAACC CCTACAGAAA CTTGCCCTCG GCCATCATCA TCTCCCTGCC 900
CATCGTGAGC TGCTGTGACG CTGTGGCCGT GACTTTCGGG AACTATCACC TGGGCGTCAT 1020
GTCTCTGATC ATCCCCGTCT TCGTGGGCGT GTCTGCTTTT GGCTCCGCTC ATGGGTCCCT 1080
GTTCACTACC TCCAGGCTCT TCTTCTGGGG GTCCCGGGAA GGCCACCTGC CCTCCATCCT 1140
CTCCATGATC CACCACAGC TCTTCAACCC CGTGGCGTCC CTGTGTTCCT CGTGTGTGAT 1200
GAGCGTGTCT TACGCTTCTT CCAAGGACAT CTCTCCGCTC ATCAACTTCT TCAGCTTCTT 1260
CAACTGGCTC TCGTGGGCGG TGGCCATCAT CGGCATGATC TGGCTGGCGC ACAGAAAGCC 1320
TGAGCTTGAG CGGCCATCA AGGTGAACCT GGCCCTGCTT GTGTCTTCA TCTTGGCGCT 1380
CCTCTTCTCG ATCGCGCTCT CCTTCTGGAA GACACCGCTG GAGTGTGGCA TCGGCTTCAC 1440
CATCATCTCT AGCGGCGTGC CCGTCTACTT CTTCGGGCTC TGGTGGAAAA ACAAGCCCAA 1500
GTGGCTCTCT CAGGCGCATCT TCTCCACGAC CGTCTGTGT CAGAAGCTCA TGCAGGTGGT 1560
CCCCAGGAG ACTATGCCAG GAGGCCGAGT GCGTCCCGGA GGAGCATGC

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#### 35 Protein sequence 14

Gene name: solute carrier family 7 (cationic amino acid transporter, y+

Unigene number: Hs.184601

Protein Accession #: NP\_003477

Pfam domain: aa permeases [46-481]

40 Transmembrane domains: 52-74, 82-104, 120-142, 145-167, 169-191, 200-222, 237-259, 275-297, 323-345, 371-393,  
 398-419, 430-452, 455-476

Cellular Localization: plasma membrane

```

45 1      11      21      31      41      51
   |      |      |      |      |      |
MAGAGPKRRA LAAPAAEEKE EAREKMLAAK SADGSAPAGE GGVTLQRNI TLLNGVAIIV 60
GTIIGSGIFV TPTGVLEKAG SPGLALVWVA ACGVPSIVGA LCYAELOTTI SKSGGDYAYM 120
LEVYVGLPAP LKLWIELLII RPSSQYIVAL VFATYLLKPL FPTCPVPEBA AKLVACLCLV 180
LLTAVNCYSV KAATRVQDAF AAKLLALAL IILGFFVQIG KGDVSNLDPK PSFEGTKLDV 240
GNIVLALYSG LPAYGGWNYL NFVTEEMINP YRNLPLAIII SLPIVTLVYV LTNLAYPTTL 300
STEQMLSSAA VAVDFGNHYL GVMSWII PVF VQLSCFSGSVN GSLPTSSRLP FVGSREGRLP 360
SILSMIHPQL LTPVPSLVFT CVMTLAYAFS KDIPSVINFP SFPNWLCLAL AIIIGMIWLRH 420
RKPELERPIK VNLALPVFFI LACFLIAVS FMKTFVECGI GFTIILSGLP VYPPGVHWNK 480
KPKWLLQGIF STTVLQCKLM QVVPQBT

```

#### 55 DNA sequence 15

Gene name: Glutamate receptor subunit

Unigene number: Hs.249141

Nucleic Acid Accession #: S40369

Coding sequence: 1-2943

```

60 1      11      21      31      41      51
   |      |      |      |      |      |
ATGCCGGCTG AGCTGCTGCT GCTGCTGATT GTTGCCCTCG CCAGCCCCAG CTGCCAGGTG 60
CTCTCATCAC TGGCGATGGC TGCAATCCTG GATGATCAGA CAGTGTGTGG CCGCGGTGAG 120
CGTCTGGCCT TGGCCTTTGC CCGGGAGCAG ATCAACGGGA TCATCGAGGT CCCAGCCAAG 180
GCCCGAGTGG AAGTAGACAT CTTTGAGCTG CAGCGGACA GCCAGTACGA GACCACGGAC 240
ACCATGTGTC AGATCTTTACC CAAAGGGGTT GTGTCTGTCC TTGGGCGCTC CTCTAGCCCA 300
GCATCTGCCT CCACCGTGAG CCATATCTGT GGAGAGAAGG AGATCCCCCA CATCAAGGTG 360
GGTCCCGAGG AGACACCCCG CCTTCAGTAC CTTCGCTTCG CGTCTGTGAG CCTGTACCCC 420
AGTAACQAGG ACGTCAAGCT GGCCTCTCC CCAATCCTCA AGTCCCTCAA CTACCCCTCG 480
GCCAGCCTCA TCTGGCCCAA GGCTGAGTGC CTGCTCGGAT TGGAGGAAC TGGTGGTGGC 540
TTCTCTATCT CCAAGGAGAC GCTGTCAAGT AGGATGTTGG ACGACAGCGG GGACCCCA 600
CCACTGCTCA AGGAGATCCG TGAAGACAAG GTGTCCACCA TCATCATOGA GCGCAACGCC 660
TCCATCTCCC ACCTCATCCT CGTAAGGCC TCGGAACCTG GAATGACCTC AGCGTTTTAC 720
AAGTACATCC TCACCAACAT GAGCTTCCCC ATCTGTCATC TGGACGATAT TGTGGAGGAC 780
TCTCTCAACA TCTTGGGCTT CTCCATGTTT AACACGTCCT ACCCTTCTTA CCCTGAGTTT 840
GTCCGCGAGC TCAACATGTC CTGGAGGGAG AACTGTGAAG GTGCACGTGG TGGTGAAGCG 900
GCGCTGTGAG CCGCCCTGAT GTTTGACGCC GTGCACGTGG TGGTGAAGCG TGTCCGAGAG 960
CTGAACCGCA CCGCAGGAGAT CGGTGTGAAG CCTTGGCCCT GTACATCGCG CAACATTGAG 1020
CCCCAGGGGA CCAAGCTCAT GAATACCTGT CCGATGTGAG AGTATGATGG GCTGACCGGG 1080
CGGGTGAAGT TCAACAGCAA AGGCGAGAGA ACCAACTACA CCGTGGCGAT CCAAGAAAAG 1140
TCCCGGCGAG GCCACCGTGA GATTGGGGTG TGGTACTCTA ACCGCAACCT GGCCATGAAT 1200
GCCACCAACC TGGACATCAA CTTGTGCGAG ACATGGGCGA ACAAGACCTT GGTGGTCA 1260
ACCATCTCTG AGAACCCATA CGTATGCGCG CGGCCCAACT TCCAGGGGCT GTCGGGGAAC 1320
GAACGCTTCG AGGCGTTCTG CTTGACATG CTGCGGGAGC TGGCGAGCT GCTCCGCTTC 1380

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5	CCGTACGGCC	TGCGTTGGT	GGAGGATGGG	CTGTACGGGG	CGCCCCGAGCC	CAAOGGCTCC	1440
	TGGACGGGCA	TGGTGGCGA	GCTCATCAAC	CGGAAGGCAG	ACCTGGCTGT	GGCCGCCTTC	1500
	ACCATCACAG	CTGAGCGGGA	GAAGGTCATC	GACTTTTCCA	AGCCCTTAT	GACCCCTGGG	1560
	ATCAGCATCC	TCTACCGAGT	GCACATGGGC	CGCAAGCCTG	GCTACTTCTC	CTTCTGGAC	1620
	CCCTTCTCCC	CTGCTGTGTG	GCTCTTCATG	CTTCTTGCC	ACCTGGCTGT	CAGCTGGCTC	1680
	CTGTTTCTGG	CTGCACGGCT	GAGCCCTAT	GAGTGGTATA	ACCCACACCC	ATGCTGCGG	1740
	GCACGCCCCC	ACATCTCTGA	GAACAGTAC	ACGCTGGCCA	ACAGCCTGTG	GTTCCTCCGTG	1800
	GGGGGCTTCA	TGCAGCAGGG	CTCGAGATC	ATGCCCCGGG	CGCTGTCCAC	GGCTGTGTG	1860
10	AGCGAGTCT	GGTGGGCTT	CACCTTGATC	ATCATCTCCT	CCTACACGGC	CAACCTGGCC	1920
	GCCTTCTCA	CCGTGAGCG	CATGGAGGTG	CCTGTGGAGT	CGGCGATGA	CCTGGCAGAT	1980
	CAGACCAACA	TGAGTATGG	CACCATCCAC	GCGGCTCCA	CCATGACCTT	CTTCCAGAT	2040
	TCACGGTACC	AAACGTACCA	GCGCATGTGG	AACTACATGC	AGTCGAAGCA	GCCCCAGGTG	2100
	TTGCTCAAGA	GCACAGAAGA	GGGCATTGCC	CGCGTCTCA	ACTCCCGCTA	GGCTTCTGT	2160
	CTGAGTCCA	CCATGAACGA	ATACCACCGG	CGCTCAACT	GCAACCTCAC	CCAGATCGGG	2220
15	GGACTCTCG	ACACCAAGGG	CTACGGCATT	GGCATGCCG	TGGGCTCCCC	GTTCGGGAT	2280
	GAGATCACAC	TGGCCATCCT	GCAGCTTCAG	GAGAACAACC	GGCTGGAGAT	CCTGAAGGAC	2340
	AAGTGGTGG	AGGGGGGCG	GTGCCCCAAG	GAGGAGGACC	ATCGAGCTAA	AGGTTTGGG	2400
	ATGGAGAAC	TTGTTGGCAT	TTTTATCGTG	CTCATCTGTG	GCCTCATCAT	TGCTGTCTTC	2460
	GTGGCGGTCA	TGGAATTCAT	ATGGTCCACA	CGGAGGTCAG	CTGAGTCCGA	GGAGGTGTGG	2520
20	GTGTGCGCAG	AGATGCTGCA	GGAGCTGCCG	CACGCCGTTT	CTTGCCGCAA	GACGTCGGT	2580
	TCCCGCGCGC	CGCCAGCGCC	GGGCGGCCCG	AGCGGGGCCC	TGCTGTCACT	GCGCGCGGTC	2640
	CGCGAGATGC	GCCTCAGCAA	CGGCAAGCTC	TACTCGGCCG	GCGCGGGCGG	GGATGCGGGC	2700
	AGCGGCGCAG	GGGCGCCGCA	GCGCTCTCTG	GACGACCGCG	GGCCCGCCAG	CGGAGCGCGA	2760
25	CGCGCGCGCG	CCACCGCTCG	CACCCACGTG	CGCGTCTGCC	AGGAGTGCAG	GCGCATCCAG	2820
	CGCGTCTCGG	CCTCGGGGCG	CGGCGCGCCT	CGCGTGTGCC	TGGGCTTCCC	CGCCGAAGCC	2880
	ACCAGCCCGC	CCCGCGCGCG	GCCTGGCCCC	GCCGCGCCCC	GGGAGCTGGC	GGAGCAAGAG	2940
	TGA						
30	Protein sequence 15						
	Gene name: Glutamate receptor subunit						
	Unigene number: Hs.249141						
	Protein Accession #: AAB22591						
	Signal sequence: 1-27						
35	Pfam domain: ANF receptor [343-400]; PBPe domain [416-785, 799-838]						
	Transmembrane domains: 297-319, 544-566, 624-646, 803-825						
	Cellular Localization: plasma membrane						
	1	11	21	31	41	51	
40	MPAEALLLLI	VAFASPSQCV	LSBLRMAAIL	DDQTVCGRGE	RLALALAREQ	INGIIEVPAK	60
	ARVEVDIPEL	QRDSQYETTD	TMCOILPKGV	VSVLGPSSSP	ASASTVSHIC	GEKEIPHIKV	120
	GPEETPRLOQ	LRFAVSLSYP	SNEDVSLAVS	RILKSFNYP	ASLCAKAEK	LLRLBELVRG	180
	FLISKETLSV	RMLDSDSDPT	PLLKEIRDDK	VSTIIIDANA	SISHLILRKA	SELGMSAFY	240
	KVILTTMDFP	ILHLQGIQVED	SSNHLGFSMF	NTSHPFYPEF	VRLANMSWRE	NCEASTYLOP	300
45	ALSAALMPDA	VHVVSVAVRE	LNRSQEIGVK	PLACTSANIW	PHGTSLMNYL	RMVEYDGLTG	360
	RVEFNSKQRL	TNYTLRILEK	SRQGHREIGV	WYSNRLAMN	ATLTDINLSQ	TLANKTLVVT	420
	TILENPYVMR	RNFPGQLSGN	ERFEGPCVDM	LRELABELLF	PYRLRLVEDG	LYGAPEPNOS	480
	WTGMVGEIN	RKADLAVAAF	TITAEREKVI	DPSKPFMTLG	ISILYRVHMG	RKPGYFSPLD	540
	PFSPAVLMFM	LJAYLAVSCV	LFLAARLSFY	EWYNPHPCLR	ARPHILENQY	TLGNSLWPFV	600
50	GGFMOQGEI	MPRALSTRCV	SGVWMAFTLI	IISSTANLA	APLTQVMEV	PVESADDLAD	660
	QTNIEYGTIR	AGSTMTFPQN	SRVQTYQRMW	NYMQSKQPSV	FKVSTEBGIA	AVLNSRYAPL	720
	LESTNVEYHR	RNLNLTQIG	GLLDTKGYGI	GMPLGSPFRD	EITLAILQLQ	ENNRLEILKR	780
	KWNEGRCRCP	EEDHRAKGLQ	MENIGGIFIV	LICGLIIAVF	VAVMEPIWST	RRSAESEEVS	840
	VQCEMLQELR	HAVSCRKTSR	SRRRRRPGGF	SRALLSLRAV	REMRLSNQKL	YSAGAGGDAG	900
55	SAHGGPQRLD	DDPGFPSSGAR	PAAPTPTCTHV	RVCQECRIQ	ALRASGAGAP	PRGLGVPAEA	960
	TSPPRRPRPGP AGPRELAEHE						
	DNA sequence 16						
	Gene name: adenosine A3 receptor						
	Unigene number: Hs.258						
60	Probeset Accession #: NM_000677						
	Nucleic Acid Accession #: NM_000677						
	Coding sequence: 768-1724						
	1	11	21	31	41	51	
65	ATCTTTGCTG	CAAAGGCTGG	GTATCGGCTG	TGCTCAGCAA	AGCGTCAACT	CGTGCAAGAA	60
	CTTAGCAGGA	ATAGTTCTGG	CTAAGGTTAG	GAGGCTGCCA	CCAAAGTCTC	TTTTTTGTTC	120
	CTCTGCTCTC	CCCGTTTGCC	TCCTTATCAT	GAGATCTTTT	TGCTAAGCTG	GCAGAAAGAT	180
	TGCATAGTCA	GTGCTTCCAG	CTCTGCTCCC	ACCTGATCCT	GCATGTCTCT	CTGGTCCCTG	240
	AATGAATGAA	CTCTGATACC	CAATCTTGTC	TGGAGCCTTC	TCTATGCCAC	TCATGGCTCC	300
70	CTTCTGCTCT	TTTCCATCTT	TTTGCTGAGA	GTTCGTAGCT	CTGTACTTCC	TCTTGGCCCA	360
	TCTCACTTCC	TGAACACACC	CTGAAGAGGG	TTGCTTATCT	TGATGGAAC	CAAAAAGCCA	420
	AAAAGCTGCA	GCCAGAGCGG	TTGAGGACAT	CTGTTTGGGG	AACTAAGAGC	AGCAGCACTT	480
	TCAGATTCA	TCCATATAGA	GCTGTCTTAC	AGCATCTGCG	AACTTGTAGG	ATGTGGGCTG	540
75	CATAAAGGGG	CTGGAAGTGA	CCACCTGTG	ATGAGCCCTT	TCTAAGGAGA	AGGGTTTCCA	600
	AGAGATCACC	CCACCAAGAA	AGGGTAGGAA	TGAGCAAGTT	GGGAATTTTA	GACTGTCACT	660
	GCACATGGAC	CTCTGGGAAG	ACGCTCTGGG	AGAGCTAGGC	CCACTGGCCC	TACAGACGGA	720
	TCTTGTCTGG	TCACTGTGCC	CTGTGGAGGT	TCCCTGGGGA	AGGCAAGATG	CCCAACAACA	780
	GCATCTCTCT	GTCATTGGCC	AATGTTACCT	ACATCACCAT	GGAAATTTTC	ATTGGACTCT	840
80	GGGCCATAGT	GGGCAACGTG	CTGGTCACT	CGTGGGTCAA	GCTGAACCCC	AGCCTGCAGA	900
	CCACCACTCT	CTATTTCATT	GTCTCTCTAG	CCCTGGCTGA	CATTGCTGTT	GGGGTGTCTG	960
	TCATGCCCTT	GGCCATTGTT	GTCAAGCTGG	GCATCACAAT	CCACTTCTAC	AGCTGCCCTT	1020
	TTATGACTGT	CCTACTGCTT	ATCTTTACCC	ACGCTCCCAT	CATGCTCTTG	CTGGCCATCG	1080
	CTGTGGACCG	ATACTTGGCG	GTCAAGCTTA	CCGTGAGATA	CAAGAGGGTG	ACCACTCACA	1140
	GAAGAATATG	GCTGGCCCTG	GGCCTTTGCT	GGCTGGTGTC	ATTCTGTGTT	GGATTGACCC	1200

5	CCATGTTTGG CTGGAACATG AAACCTGACCT CAGAGTACCA CAGAAATGTC ACCTTCCTTT 1260
	CATGCCAATT TGTTCCTGTC ATGAGAATGG ACTACATGGT ATACTTCAGC TTCCTCACCT 1320
	GGATTTCAT CCCCTCGGT GTCATGTGCG CCATCTATCT TGACATCTTT TACATCATTC 1380
	GGAAACAACT CAGCTGAAC TTATCTAACT CCAAGAGAC AGGTGCATTT TATGGACGGG 1440
	AGTTCAAGAC GGCTAAGTCC TTGTTCTGG TTCTTTCTT GTTTGCTCTG TCATGGCTGC 1500
	CTTTATCTAT CATCAACTGC ATCATCTACT TTAATGGTGA GGTACCACAG CTGTGCTGT 1560
	ACATGGGCAT CCTGCTGTCC CATGCCAAT CCATGATGAA CCTATGCTG TATGCTTATA 1620
10	AAATAAAGAA GTTCAAGGAA ACCTACCTTT TGATCCTCAA AGCTGTGTG GTCTGCCATC 1680
	CCTCTGATTC TTGGACACA AGCATTGAGA AGAATTCTGA GTAGTTATCC ATCAGAGATG 1740
	ACTCTGTCTC ATTGACCTTC AGATTCCCA TCAACAAACA CTGAGGGCC TGTATGCCCTG 1800
	GGCCCAAGGA TTTTACATC CTTGATTACT TCCACTGAGG TGGGAGCATC TCCAGTGCTC 1860
	CCCAATTATA TCTCCCCAC TCCACTACTC TCTTCTCTCA CTTCATTTT CTCTTGTCTC 1920
	TCTCTCTAA TCTAGTGTG TGGAGGCTG ACTTGGGGAC AACGTATTAT TGATATTATT 1980
15	GTCTGTCTTC CTCTTCCCA ATAGAAAGAA AAGTCATGGA GCCTGAAGGG TGCTAGTTG 2040
	ACTTACTGAC AAAAGGCTCT AGTTGGGCTG AACATGTGTG TGGTGTGAC TCATTTCCAT 2100
	GCCATTGTGG AATTGAGCAG AGAACCTGCT CTCGGAGGAT GCCTAGAGGA TTTTGGGAAC 2160
	AGAAGAAATA AACTGAGTTT AAGGGGACT TAAACTGCTG AATTACCTG TGGATGTTTT 2220
	TGAGTAAATA AAAGCTAATA G
20	<u>Protein sequence 16</u>
	Gene name: adenosine A3 receptor
	Unigene number: Hs.258
	Protein Accession #: NP_000668
	Signal sequence: none found
25	Pfam domain: 7tm_1 [29-282]
	Transmembrane domains: 12-34, 50-72, 86-108, 120-150, 179-201, 229-251
	Cellular Localization: plasma membrane
30	1 11 21 31 41 51
	MPNNSTALS ANVTYITMEI FGLCAIVGN VLVICVVKLN PSLQTTTFYF IVSLALADIA 60
	VGVLVMLPAI VVSLGITIHP YSCLFMTCLL LIFTHASIMS LLAIAVDRL RVKLTVRYKR 120
	VTTTHRIHLA LGLCHLVSL VGLTTPMFWN MKLTSEYHRN VTFLSQCFVS VMKMDVMYVF 180
	SPLTWIPIPL VVMCAIYLDI FYIIRNKL SL NLSNKTGQA FVGRFETAK SLFLVLFLPA 240
35	LSWLPLSIIN CIIYFNGEVP QLVLYMGILL SHANSMPNPI VYAYKIKKFK ETVLLILKAC 300
	VVCHPDSLD TSIEKNSE
	<u>DNA sequence 17</u>
	Gene name: glypican 1
	Unigene number: Hs.2699
40	Probeset Accession #: X54232
	Nucleic Acid Accession #: NM_002081
	Coding sequence: 222-1898
45	1 11 21 31 41 51
	GGCTGCCCGA GGGAGCGTTC GGACCTCGCA CCGCGGCGCG CCGCGCGCGC GCGCGCGCGC 60
	GGCTTTTGTT GTCTCGCGCT CCTCGGCGCG CCGCGCGCTCT GGACCGCGAG CCGCGCGCGC 120
	CGGAGACCTTG GCTCTGCGCT TCGCGGCGCG GAACTGCGCA GGACCGCGCC AGGATCCGAG 180
	AGAGGCGCGG GCGGCTGGCC GGGGGCGCGG CCGCGCGCGC CATGGAGCTC CCGGCGCGAG 240
50	GCTGGTGGCT GCTATGTGCG GCGCGAGCGC TGGTGGCTG CCGCGCGCGG GACCGCGCCA 300
	GCAAGAGCCG GAGCTGCGCG GAGGTCCGCG AGATCTACGG AGCCAAAGGGC TTCAGCCTGA 360
	CGCAGGTGCG GAGCGCGGAG ATCTCGGGTG AGCACTGCG GATCTGTCCC CAGGCGTACA 420
	CCTGTGTCAC CAGCGAGATG GAGGAGAACG TGCCCAACCG CAGCCATGCC GAGCTGGAGA 480
	CGCGCTCCCG GGACAGCAGC CGCTCTGCG AGGCCATGCT TGCCACCCAG CTGCGCAGCT 540
55	TCGATGACCA CTTCACGAC CTGCTGAAAG ACTCGGAGCG GAGCTGCGAG GCGACCTTCC 600
	CCGCGCGCTT GGGAGAGCTG TACACGCGAG ACGCGAGGCG CTTCGCGGAG CTGCTACTCAG 660
	AGCTGCGCTT GTACTACCGG GGTGCCAACG TGCACTGGA GAGAGCGCTG GCGGAGTTCT 720
	GGGCGCGCTT GCTCGAGCGC CTCTCAAGC AGCTGCACCC CAGCTGCTG CTGCGCTGATG 780
	ACTACCTGGA CTGCGTGGG AAGCAGGCGG AGGCGCTGCG GCGCTTGGG GAGGCGCGGA 840
60	GAGAGCTGCG CTTGCGGGCC ACCCGTGCCT TGGTGGCTG TCGCTCCTTT GTGCGAGGCC 900
	TGGCGCTGGC CAGCGAGCTG GTCCGGAAAG TGGCTCAGGT CCGCTTGGG CCGGAGTGTCT 960
	CGAGAGCTGT CATGAAGCTG GTCTACTGTG CTCACTGCTT GGGAGTCCCC GCGCGCAGGC 1020
	CCTGCCCTGA CTATTGCGGA AATGTGCTCA AGGCTGCTT TGCCAAACAG GCGGAGCTGG 1080
	ACGCGAGTGT GAGGAACCTC CTGACTCCA TGGTGTCTAT CACCGACAG TTCTGGGTGA 1140
65	CATCGGCTGT GGAGAGTGT ATCGGCGAG TGACACCTG GCTGGCGGAG GCGATCAACG 1200
	CCCTCCAGGA CAACAGGAG ACCTCTACCG CCAAGGTCTAT CAGGGCTGCG GCGAACCCCA 1260
	AGGTCAACCC CAGGCGCTT GGGCTGAGG AGAAGCGCG CCGGGCGAAG CTGGCCCCGC 1320
	GGGAGAGGCC ACCCTCAGGC ACGCTGGAGA AGCTGGTCTC TGAAGCCAAAG GCCAGCTCC 1380
	CGGACCTCCA GAACTCTGG ATCAGCTCC CAGGACACT GTGAGTGAAG AAGATGGCCC 1440
70	TGAGCACTGC CAGTGATGAC CGCTGCTGGA ACGGATGGC CAGAGGCGCG TACCTCCCG 1500
	AGGTATCGGG TGACGGCTG GCCAACAGA TCAACAAACC GAGGTGGAG GTGACATCA 1560
	CCAAAGCGGA CATGACCAT CCGCAGCAGA TCATGCAGCT GAAGATCATG ACCAACCGGC 1620
	TGCGCAGCGC CTACAAAGGC AACGACGTG ACTTCCAGGA CGCCAGTGAC GACGCGAGCG 1680
	GCTCGGCGAG CGTGATGGC TGTCTGGATG ACTTCTGCG CCGGAAGGTC AGCAGGAAGA 1740
75	GCTCCAGCTC CCGAGCGCCC TTGACCCATG CCGTCCGAGG CTTCTCAGAG CAGGAAGGAC 1800
	AGAAAGCTTC GGTCTCCAGC TGCCCCCAGC CCGGACCTT CTTCTGCCCC CTCTCTCTCT 1860
	TCTTGCCCTT TACAGTAGCC AGGCGCGGT GCGGTAACT GCGCCAAAGC CCGAGGAGA 1920
	GAGGCCAAGG ACTGACTTTG CCAAAATAC AACACAGAGC ATATTAAAT CACTCAGCC 1980
	TGGAGAGGCC TGGGTGGGA CAGGAGGGC CGCGGCTCT GAGCAGGGGC AGGCGCAGAG 2040
80	GTCCAGCCCC CAGGCTGGC CTGCTGCTG TTTCTGCTT TTAATTTTGT ATGAGTCTCT 2100
	CAGGTGAGCT GGGAGCAGT GTGCCAAA GCGATGTATT TCGGGACCT CAGGGCAGC 2160
	TCCGCTGCTC TAGCCCTCCC CCGAGCTCCC TGACCGCGCG CAGAGCAGC CCGTCCAGGC 2220
	CTACAGAGA GGCCTCAAG CAACCGCTG GAGCCACAG CAGGCTGTG CTTCTCTCCC 2280
	CGCTCTCTC CACTGGACT CCGAGCAGG CCGCAGGCG CAGCCCGGCG CAGCCCGGAG 2340
	CCTCCAGAGA AGCCCGCAC GGGCTGTCTG GGTGTCGCG ATCCAGGCTC TGGCAGAGCC 2400

TCTGAGATGA TGCATGATGC CCTCCCCCTCA GCGCAGGCTG CAGAGCCCCG CCCACCTCC 2460  
 CTGGCCCTTT GAGGGGCCCC AGCGTCTGCA GGGTGACGCC TGAGACAGCA CCACTGCTGA 2520  
 GGAGTCTGAG GACTGTCTCT CCACAGAGCC TGCACTGAGG GGCCCTCCAT GCGCAGATGA 2580  
 GGGGCCACTG ACCCACCCTG CTTCTGCTG GAGGAGGGGA AGCTGGGCCC AAAGGCCCAG 2640  
 5 GGAGGCAGCG TGGGCTCTGC CAATGTGGGC TGCCCCCTGC ACACAGGGCT CACAGGGCAG 2700  
 GCCTTGCTGG GGTCCAGGGC TGTGGAGGA CCCCAGGGGC TGAGGAGCAG CCAGGACCCG 2760  
 CCTGTCTCCA TCTCACCCA GATCAGGAAC CAGGGCTCC CTGTTACAGG TGACACAGGT 2820  
 CAGGGCTCAG AGTGACCTCT GGCTGTCACT TGCTCACAGG GATGCTGGTG GCTGGTGAGA 2880  
 CCCCACACTG CACACGGGAA TGCTAGGTC CTTCCCGAG CCAGCCAGCT GCACCTGCAGG 2940  
 10 GCAGCGGGAC CTGATAGTT AAGGGCTTTT CCAACATGC ATCCATTAC TGACACTTCC 3000  
 TGTCTTGTG CATGAGAGG TGTTCGCTCC TCCAGATGG CTTCCGAGGC CCGCAGGGCC 3060  
 CACCTTGAGC CCGTGTGACC TCTGTCACT CACTGAGGCC ATCAGGGCCC TGCCCCAGGC 3120  
 CTGGACGGGC CTTCTTCCC TCTGTGCC CAGCTGCCAG GTGGCCCTGG GGAGGGGTGG 3180  
 TGTGGTGTG GGAAGGGGTC CTGAGGGGG AGGAGGACTT GGAGGGTCTG GGGCAGCTG 3240  
 15 TCTGAACCG ACTGACCTG AGGAGGCGC TTAGTGTGC TTTGCTTTC ATCACCGTCC 3300  
 CGCACAGTG CCGAGGTCC CCGTGTGCT GTCAAGTCC CATGCTTGT TCTCTGGAAC 3360  
 CTGACTTTAG ATGTTTGGG ATCAGGAGC CCAACACAG GCAAGTCCAC CCAATAATA 3420  
 CCTGCCAGT GCCAGGCTG GCTGGGACT CTGGCACAGT GATGCCGGGC GCCAGGACG 3480  
 CAGCACTCC GCTGCACAG GACGGCTAG GGGTGGCGT CAGACCCAC CCACTGCTCA 3540  
 20 TCTCTGGAAG GGCAGCCCT GAGTGGTCAC TGGTCAGGGC AGTGGCCAAG CCGTGTGTG 3600  
 CCTCTCCA CAAGTCCCC CACCGCTCA GTGTACGGG GTGACGTGTG TTTCTTTAG 3660  
 TCTTGTATG AATAAAGGC TGGAAACCTA AA

25 **Protein sequence 17**  
 Gene name: glypican 1  
 Unigene number: Hs.2699  
 Protein Accession #: NP\_002072  
 Signal sequence: none found  
 Pfam domain: Glypican protein [2-490]  
 Transmembrane domains: none found  
 Cellular Localization: plasma membrane

1 11 21 31 41 51  
 MELRARGMWL LCAAAALVAC ARGDPASKSR SCGEVRQIYG AKGFSLSDVP QAEISGEHLR 60  
 35 ICPOGTYCTCT SEMEENLANR SHALETALR DSSRVLAQML ATQLRSFDDH FOHLNDSER 120  
 TLQATPPGAP GELYTNARA FRDLYSELRL YRGANLHLE ETLAEFWARL LERLFKQLHP 180  
 QLLLPDDYLD CLGKQAEALR PFGEAPRELRL LRATRAEVAA RSFVQGLQVA SDVVRKVAQV 240  
 PLGPECSRVA MKLVYCAHCL GVFGARPCPD YCRNVLEKGL ANQADLDASW RNLDSHMLI 300  
 40 TDKFWGTSGV ESVIGSVHTW LAEAINALQD NRDTLTAKVI QCGGNPKVNP QGPGPEEKRR 360  
 RGLAPRERF PSGLLEKLVS EAKAQLRDVQ DFNISLPGTL CSEKMLSTA SDDRGNMGMA 420  
 RGRYLPVVMG DGLANQINNF EVEVDITKPD MTIRQQIMQL KIMTNRLRSA YNGNDVDFQD 480  
 ASDDGSGSGS

45 **DNA sequence 18**  
 Gene name: NY-REN-24 antigen  
 Unigene number: Hs.128425  
 Nucleic Acid Accession #: AF155102  
 Coding sequence: 27-908

1 11 21 31 41 51  
 50 GCGAGGGCGA GGGCAGGCG GTGCTCATGG AGGAGGACCT GATCCAGCAG AGCCTGGACG 60  
 ACTACGACGC CCGCAGGTAC AGCCCGCGGC TGCTCACGGC GCACAGAGCTG CCACTGGACG 120  
 CGCAGTGCT GGAACCGGAT GAGGACCTGC AGCGCTCGCA GCTCTCGCGC CAGCAGCTCC 180  
 55 AGGTACGGG AGACGCCAGC GAGAGCGCGC AGGACATCTT CTTCCGGCGG GCCAAGGAGG 240  
 CATGCGGCCA GAGCAGGCGC CAGTTACGGC TGGAGATGCC ACTCACCGGC AAGGCCTACC 300  
 TGTGGGCCGA CAAGTACCG CCAACGCAAGC CGCGTTCTT CAACCGCGTG CACACGGGCT 360  
 TGAGTGGAA CAAGTACAAC CAGACGCACT ACAGCTTTGA CAACCCACCG CCCAAGATCG 420  
 TGCAGGGATA CAAGTTCAAC ATCTTCTACC CGACCTCAT CGACAAGCGC TCCACGCCCG 480  
 60 AGTACTTCTT GAGGCGCTGC GCGACACA AGGATTTGCG CATCCTCGCG TTCAACGCGG 540  
 GCGCGCTACG AGGACATCG TTTCAAGATC GTCAACCGCG AGTGGGAATA CTGCAACCGC 600  
 CACCGCTTCC GCTGCCAGTT TGCCAACGGC ATCTTCCAGC TGTGCTTTCA CTTCAAGCGC 660  
 TACCGCTATC GCGGTGACG GCCCTGGGGA ACGGCAGGCC AGGAGGGCGG AGGGCCACAC 720  
 GGGTGCCACA GCCCAGGTG GAGTGGCCCA GCGCGCAGGC TTGTTCTTCA GCATCCGACG 780  
 65 GGAACATCTC CAACAGAAC AAAACGGAAA GTGCTTCCCG GACCCCCAGA GGGCCACCCA 840  
 ACCTCACCGA TCACAGCCC CAGACCAACC ACAGCCCTCC CAGACACCCC GCGCTCATCT 900  
 GGAAATAGTT CCGTTTGTG CTCTAAAAG ACTTGTAGGT GGGAAAAAAA ATCTTTTGTG 960  
 CTCATGGAAT TGGCTATTG GCAAGATCGC ATGTTTTTTT AATAAACGTT GTATTTTAGA 1020  
 ATAAAA

70 **Protein sequence 18**  
 Gene name: NY-REN-24 antigen  
 Unigene number: Hs.128425  
 Protein Accession #: AAD42868  
 Signal sequence: none found  
 Transmembrane domains: none found  
 Cellular Localization: plasma membrane

1 11 21 31 41 51  
 80 GEQEAVLME EDLIQQLDD YDAGRYSPRL LTAHELPLDA HVLEPDEDLQ RLQLSRQQLQ 60  
 TGDASESAE DIFPRRAKEG MGQDEAQFSV EMPLTGKAYL WADKYRPRKP RPFNRVHTGF 120  
 WNKYNQTHY DFDNPPPKIV QYKFNIFYP DLIDKRSTPE YPLEACADNK DPAFLRPTRG 180  
 LRGRFPDR QPRVQILAPP RLPLPVCQRH LPAVLSLQAL PLSAVTALGN GRPGGPRATR 240  
 PQPRSEWPS RQACSSASDG NISNRSKTES ASRTPRGPFN LTSHQPTTH SPQTPRLIW 300



## DNA sequence 19

Gene name: tumor necrosis factor receptor superfamily, member 1A

Unigene number: Hs.159

Probeset Accession #: BE295782

Nucleic Acid Accession #: NM\_001065

Coding sequence: 256-1623

5  
10  
15  
20  
25  
30  
35  
40  
45

1	11	21	31	41	51	
GGGCCAGTG	ATCTTGAACC	CCAAAGGCCA	GAACGTGGAGC	CTCAOTCCAG	AGAAATTCGA	60
GAATAATTAA	GCAGAGAGGA	GGGAGAGAT	CACTGGGACC	AGGCCGTGAT	CTCTATGCCC	120
GAGTCTCAAC	CCTCAACTGT	CACCCCAAGG	CACITGGGAC	GTCTGGACA	GACCGAGTCC	180
GGGAAAGCCC	CAGCACTGCC	GCTGCCACAC	TGCCCTGAGC	CCAAATGGGG	GAGTGAGAGG	240
CCATAGCTGT	CTGGCATGGG	CCTCTCCACC	GTGCCCTGACC	TGCTGCTGCC	GCTGCTGCTC	300
CTGGAGCTGT	TGGTGGGAAT	ATACCCCTCA	GGGGTTATTG	GACTGCTCCC	TCACCTAGGG	360
GACAGGGAGA	AGAGAGATAG	TGTGTGTCCC	CAAGGAAAAT	ATATCCACCC	TCAAAATAAT	420
TOGATTGTCT	GTACCAAGTG	CCACAAGGGA	ACCTACTTGT	ACAATGACTG	TCCAGGCCCG	480
GGGCAGGATA	GGACTGCGAG	GGAGTGTGAG	AGCGGCTCCT	TCACCGCTTC	AGAAAACCAC	540
CTCAGACACT	GCCTCAGCTG	CTCCAAATGC	CGAAGGAAA	TGGGTCAAGT	GCAGATCTCT	600
TCCTTGACAG	TGGACCGGGA	CACCGTGTGT	GGCTGCAGGA	AGAACCAGTA	CCGGCATTAT	660
TGGAGTGAAG	ACCTTTTCCA	GTGCTTCAAT	TGCAGCTCTT	GCCTCAATGG	GACCGTGAC	720
CTCTCCCTGCC	AGGAGAAACA	GAACACCTGT	TGCACCTGCC	ATGCAGGTTT	CTTTCTAAAG	780
GAATAACGAT	GTGTCTCCTG	TAGTAACTGT	AAGAAAAGCC	TGGAGTGCAC	GAAATTTGTC	840
CTACCCCAAG	TTGAGAAATG	TAAGGGCACT	GAGGACTCAG	GCACCAAGT	GCTGTTGCC	900
CTGTCATTT	TCCTTGTGCT	TTGCTTTTIA	TCCCTCTCT	TCATTTGTTT	AATGTATGCG	960
TACCAACGCT	GGAGTCCAA	GCTCTACTCC	ATTGTTTGTG	GGAAATCGAC	ACCTGAAAAA	1020
GAGGGGAGC	TTGAAGGAAC	TACTACTAAG	CCCTGGCCCC	CAAAACCAAG	CTTCAGTCCC	1080
ACTCCAGGCT	TCACCCCTAC	CCTGGGCTTC	AGTCCCTGTC	CCAGTTCAC	CTTCACCTCC	1140
AGCTCCACT	ATACCCCTGC	TGACTGTCCC	AACITTTGCG	CTCCCGCGAG	AGAGGTGGCA	1200
CCACCTATGC	AGGGGGCTGA	CCCACTCCTT	GGACAGCCCC	TGGCTCCGA	CCCCATCCCC	1260
AAACCCCTTC	AGAAAGTGGG	GGACAGCCCC	CACAGCCAC	AGAGCTTAGA	CACTGATGAC	1320
CCCGCGACGC	TGTACGCCGT	GGTGGAGAAC	GTGCCCTCGT	TGCCCTGGAA	GGAATTCGTG	1380
CGCGCGCTAG	GGCTGAGCGA	CCACGAGATC	GATCGGCTGG	AGCTGCAGAA	CGGGCGCTGC	1440
CTGGCGAGG	CGCAATACAG	CATGCTGGCG	ACCTGGAGGC	GGCCGACGCC	CGCGCGCGAG	1500
GCCACGCTGG	AGCTGCTGGG	ACGCGTGCTC	CGCGACATGG	ACCTGCTGGG	CTGCTGGGAG	1560
GACATCGAGG	AGGCGCTTTG	CGGCCCGGCC	GCCTCCCGCC	CGCGCGCCAG	TCTTCTCAGA	1620
TGAGGCTGGG	CCCCCTGGGG	CAGCTCTAAG	GACCGTCTGT	CGAGATGGCC	TTCCAAACCC	1680
ACTTTTCTCT	GGAAAGGAGG	GGTCTGCGAG	GGGCAAGCAG	GAGCTAGCAG	CCGCTACTTT	1740
GGTGCTAACC	CCTCGATGTA	CATAGCTTTT	CTCAGCTGCC	TGGCGCGCCG	CGACAGTCAG	1800
CGCTGTGCGC	GCGAGAGAGG	GTGCGCGCGT	GGCTCAAGAG	CCTGAGTGGG	TGGTTTTCGA	1860
GGATGAGGGA	CGCTATGCCCT	CATGCCCGTT	TTGGGTGTCC	TCACCAAGCA	GGCTGCTCGG	1920
GGGCGCCCTG	TTCTGCTCCT	AGCCTTTTTC	ACAGTGCATA	AGCAGTTTTC	TTTGTTTTTC	1980
TTTGTTTTTC	TTTGTTTTTC	AAATCAATCA	TGTTACACTA	ATAGAAACTT	GGCACTCCTG	2040
TGCCCTCTGC	CTGACACAGC	ACATAGCAAG	CTGAAGTCTC	CTAAGGCAGG	GGCGAGCAGC	2100
GAACAATGGG	GCCTTCAGCT	GGAGCTGTGG	ACTTTTGTAC	ATACACTAAA	ATTCTGAAGT	2160

## Protein sequence 19

Gene name: tumor necrosis factor receptor superfamily, member 1A

Unigene number: Hs.159

Protein Accession #: NP\_001056

Signal sequence: 1-29

TNFR domain: 44-81, 84-125, 127-166, 168-195

Transmembrane domains: 211-234

Cellular Localization: plasma membrane

55  
60  
65

1	11	21	31	41	51	
MGLSTVFDLL	LFLVLELLLV	GIYPSGVIGL	VPHLDREKR	DSVCPQGYI	HPQNSICCT	60
KCHKGTLYLN	DCPGPGQDID	CRCESSGFT	ASENHLRHCL	SCSKCRKEMG	QVEISSCTVD	120
RDTVCGCRKN	QYRHYWSEN	FQCPNCSLCL	NGTVHLBCQB	KQNTVCTCHA	GFPLRENECV	180
SCSNCKKSL	CTKLCLPQIE	NVKGTEDEGT	TVLLPLVIFP	GLCLLSLLFI	GLMYRYQRWK	240
SKLYSIVCGK	STPEKGELE	GTITKPLAPN	PSFSPITGPT	PTLGFSVPVS	STFTSSSTYT	300
PGDCPNFAAP	RREVPAPYQG	ADPILATALA	SDPIFNPLQK	WEDSAHKPQS	LDTDDPATLY	360
AVVENVPPLA	WKEPVRRLGL	SDHEIDRLLE	QNGRCLREAG	YSMLATWRRR	TPRREATLEL	420
LGRVLRDMDL	LGCLLEDEBA	LCGPAALPPA	PSLLR			

## DNA sequence 20

Gene name: prominin (mouse)-like 1

Unigene number: Hs.112360

Probeset Accession #: R40057

Nucleic Acid Accession #: NM\_006017

Coding sequence: 38-2635

75  
80

1	11	21	31	41	51	
CCAAGTCTTA	CCTCATGTTT	GGAGGATCTT	GCTAGCTATG	GCCCTCGTAC	TGGGCTCCCT	60
GTGCTGCTG	GGGCTGTGGG	GGAACCTCTT	TTCAAGAGGG	CAGCCTTCAT	CCACAGATGC	120
TCCTAAGGCT	TGGAAATTATG	AATTGCCCTGC	AACAAATTAT	GAGACCCAAAG	ACTCCCATAA	180
AGCTGGACCC	ATTGGCATTG	TCCTTGAAGT	AGTGATATAT	TTTCTCTATG	TGGTACAGCC	240
GCCTGATTTC	CCAGAAGATA	CTTGAGAGAA	ATTCTTACAG	AAGGCATATG	AATCCAAATG	300
TGATTATGAC	AAGCCAGAAA	CTGTAACTCT	AGGTCTAAAG	ATTGTCTACT	ATGAAGCAGG	360
GATTATTCTA	TGCTGTGTCC	TGGGCTGCT	GTTTATTATT	CTGATGCCTC	TGGTGGGGTA	420
TTTCTTTTGT	ATGTGTGCTT	GCTGTAAACA	ATGTGGTGGG	GAAATGCACC	AGCGACAGAA	480
GGAAAAAGGG	CCCTTCCTGA	GGAAATGCTT	TGCAATCTCC	CTGTTGOTGA	TTGTATAAAT	540
AATAAGCATT	GGCATCTTCT	ATGTTTGTGT	GGCAATCTAC	CAGGTAAGAA	CCCGGATCAA	600
AAGGAGTCGG	AAACTGGCAG	ATAGCAATTT	CAAGGACTTG	CGAACTCTCT	TGAATGAAAC	660

TCCAGAGCAA ATCAAAATATA TATTGGCCCA GTACAACACT ACCAAGGACA AGGGGTTTCA 720  
 AGATCTGAAC AGTATCAATT CAGTGTCTAGG AGGCGGAATT CTTGACCGAC TGAGACCCAA 780  
 CATCATCCCT GTTCTTGATG AGATTAAGTC CATGGCAACA GCGATCAAGG AGACCAAGA 840  
 5 GGCGTTGGAG AACATGAACA GCACCTTGAA GAGCTTGAC CACAAAGTA CACAGCTTAG 900  
 CAGCAGTCTG ACCAGCGTGA AACTAGCCCT GCGGTCTCT CTCAATGACC CTCTGTGCTT 960  
 GGTGCATCA TCAAGTGA AAA CCTGCAACAG CATCAGATTG TCTCTAAGCC AGCTGAATAG 1020  
 CAACCCGTGAA CTGAGGCGAG TTCCACCCGT GGATGCAGAA CTTGACAAAG TTAATAACGT 1080  
 TCTTAGGACA GATTTTGGATG GCCTGGTCCA ACAGGGCTAT CAATCCCTTA ATGATATACC 1140  
 10 TGACAGAGTA CAAAGCCAAA CCAGGACTGT CGTAGCAGGT ATCAAAAGGG TCTTGAATTC 1200  
 CATTGGTTCA GATATCGACA ATGTAACCTA CGCTCTTCTT ATTCAAGATA TACTCTCAGC 1260  
 ATTCTCTGTT TATGTTAATA ACACCTGAAG TTACATCCAC AGAAATTTAC CTACATTGGA 1320  
 AGAGTATAGT TCATACTGGT GGCTGGGTGG CCTGGTCATC TGCTCTCTGC TGACCCCTCAT 1380  
 OGTGATTTT TACTACCTGG GCTTACTGTG TGGCGTGTGC GGCTATGACA GGCATGCCAC 1440  
 15 CCGGACCAACC CGAGGCTGTG TCTCCAAAC ACAGGCGCTC TTCTCATGG TTGGAGTTGG 1500  
 ATTAAGTTTC CTCTTTTGT GGTATTGAT GATCATTGTG GTTCTTACCT TTGCTTTGG 1560  
 TGCAAATGTG GAAAACTGA TCTGTGAACC TTACAGGAGC AAGGAATTAT TCCGGGTTTT 1620  
 GGATACACCC TACTACTTAA ATGAAGACTG GGAATACTAT CTCTCTGGGA AGCTATTTAA 1680  
 TAAATCAAAA ATGAAGCTCA CTTTTGAACA AGTTTACAGT GACTGCAAAA AAAATAGAGG 1740  
 20 CACTTACGGC ACTCTTCACC TGCAGAACAG CTTCAATATC AGTGAACATC TCAACATTAA 1800  
 TGAGCATACT GGAAGCATAA GCAGTGAATT GGAAGTCTG AAGTAAATC TTAATATCTT 1860  
 TCTGTTGGGT GCAGCAGGAA GAAAAACCT TCAGGATTTT GCTGCTTGTG GAATAGACAG 1920  
 AATGAATTAT GACAGCTACT TGGCTCAGC TGGTAAATCC CCGCAGGAG TGAATCTTT 1980  
 ATCATTGCA TATGATCTAG AAGCAAAAGC AAACAGTTTG CCGCCAGGAA ATTTGAGGAA 2040  
 25 TCCTCTGAAA AGAGATGCAC AAACATTTAA AACAAATTC CAGCAACGAG TCCTTCTAT 2100  
 AGAACAAATCA CTGAGCACTC TATACCAAGC CGTCAAGATA CTTCAACGCA CAGGGAATGG 2160  
 ATTGTTGGAG AGAGTAACTA GGATTCTAGC TTCTCTGGAT TTGCTCAGA ACTTCATCAC 2220  
 AAACAATACT TCCTCTGTGA TTAATTGAGG AACTAAGAAG TATGGGAGAA CAATAATAGG 2280  
 ATATTTTGA CATTATCTGC AGTGGATCGA GTTCTCTATC AGTGAGAAAG TGGCATCGTG 2340  
 30 CAAACCTGTG GCCACCGCTC TAGATACTGC TGTGATGTC TTCTGTGTA GCTACATTAT 2400  
 CGACCCCTTG AATTGTTTTT GGTTTGGCAT AGGAAAAGCT ACTGTATTTT TACTTCCGGC 2460  
 TCTAATTTT GCGGTAAAAC TGGCTAAGTA CTATCGTGA ATGGATTCCG AGGACGTGTA 2520  
 CGATGATGTT GAAACTATAC CCATGAAAAA TATGGAAAAA GGTAAATAGT GTTATCATAA 2580  
 AGATCATGTA TATGGTATTC ACAATCCTGT TATGACAAAG CCATCACAAC ATTGATAGCT 2640  
 35 GATGTTGAAA CTGCTTGAGC ATCAGGATAC TCAAGTGGG AAGGATCACA GATTTTGGT 2700  
 AGTTTCTGGG TCTACAGGA CTTTCCAAAT CCAGGAGCAA CGCCAGTGGC AACGTAGTA 2760  
 CTCAGGCGGG CACCAAGGCA ACGGCACCAT TGGTCTCTGG GTAGTGCTTT AAGAAATGAC 2820  
 ACAATCAGCT TATAGTCCAT GGTCCATCAC TATTCAAGGA TGACTCCCTC CCTTCCGTGC 2880  
 TATTTTGTG TTTTACTTTT TTCACTGAG TTCTATTATA GACACTACAA CATATGGGGT 2940  
 40 GTTGTGTTCC ATTGATGCA TTCTATCA AACTCTATCA AATGTGATGG CTAGATTCTA 3000  
 ACATATTGCC ATGTGTGGAG TGTGCTGAAC ACACACCACT TTACAGGAAA GATGCATTTT 3060  
 GTGTACAGTA AACGGTGAT ATACCTTTTG TTACCACAGA GTTTTTTAAA CAAATGAGTA 3120  
 TTATCATGAT TTTCTTAAA TGAGCTAAAT AAGTACCAT TGACTTCTTG GTGCTGTGTA 3180  
 AAATAATFCA TTTTCACTAA AAGTGTGTGA AACCTACAGC ATATTCTTCA CGCAGAGATT 3240  
 45 TTATCTGAT ATACTTTAT AAAGATTGGC CATGTTCCAC TTGGAATGG CATGCAAAAG 3300  
 CCATCATAGA GAAACCTGGC TAACTCCATC TGACAAATTC AAAAGAGAGA GAGAGATCTT 3360  
 GAGAGAGAAA TGCTGTTCGT TCAAAAGTGG AGTTGTTTTA ACAGATGCCA ATTACGGTGT 3420  
 ACAGTTTAA ACAGTTTTCT GTTGCAATG GATAAACATT AATTGGAGTG CAGCTAACAT 3480  
 GAGTATCATC AGACTAGTAT CAGTGTTCCT AAAATGAAAT ATGAGAAGAT CCTGTCAAA 3540  
 50 TTCTTAGAT TGGGTGCCAG CATGGATGAA ACCTTTGAGT TTGGTCCCTA AATTGTGATG 3600  
 AAAGCACAAG GTAATATTC ATTTGCTTCA GGAGTTTCAT GTTGATCTG TCATTATCAA 3660  
 AAGTATGAC CAATGAAGAA CTGGTCCGAC AAAATTTAAC GTTGATGTA TCGAATTCCA 3720  
 GATGTAGGCA TTCCCCCCAG GTCTTTTCAT GTGCAGATTG CAGTTCTGAT TCATTGTAAT 3780  
 AAAAGAGAAC TTGGC

55 **Protein sequence 20**  
 Gene name: prominin (mouse)-like 1  
 Unigene number: Hs.112360  
 Protein Accession #: NP\_006008  
 Signal sequence: 1-21  
 60 Transmembrane domains: 105-127, 157-179, 438-460, 482-504, 784-806  
 Cellular Localization: plasma membrane  
 1 11 21 31 41 51  
 MALVLGSLLL LGLQNSPSG GQPSSTDAPK AMNYELPATN YETQDSHRKAG PIGILFELVH 60  
 65 IPLYVVPQRP PVEDTLRKFL QKAYESKIDY DKPETVILGL KIVVYEAGII LCCVLGILLFI 120  
 ILMPLVGYPF CMCRCKNKG GEMHQKQEN GPFLRKCPAI SLLVICIIIS IGIFYGPVAN 180  
 HQVRTRIKRS RKLADSNFKD LRTLNETPE QIKYILAQYN TTQDKAPTDL NSINSVLGG 240  
 ILDRLRPNII PVLDEIKSMA TAIKETKRAL ENMNSTLKS LHQSTQLSSS LTSVKTSLSR 300  
 70 SLNDPLCLVH PSETCNISIR LSLSQLNSNP ELRQLFPVDA ELDNVNVLRL TDLGLVQGG 360  
 YQSLNDIPDR VQRQTTTVA GIKRVLSNIG SDIDNVQRL PIQDILSAFS VYVNTSEYI 420  
 HRNLTLEBY DSYWMLGGLV ICSLLTLIVI FYVLGLLGV CGYDRHATPT TRGCVSNTGG 480  
 VFLMVGVLGS FLPCWILMII VVLTFVFGAN VEKLICEPYT SKELFRVLDI PYLLNEDWEY 540  
 75 YLSGKLFNKS RWEKLTPEQVY SDCKQNRGTI GTLHLQNSFN ISEHLNINEH TGSISSELES 600  
 LKVNINIFLL GAAGRKQLQD FAACGIDRMN YDSYLAQTGK SPAGVNLSP AYDLEAKANS 660  
 LPPGNLRNLS KRDAQTIKTI HQQRVLPFIEQ SLSTLYQSVK ILQRTGNGLL ERVTRILASL 720  
 DPAQNFIITN TSSVIIIEBK KYGRITIGYF ERYLQNIIEFS ISEKVASCP VATALDTAVD 780  
 VFLCSYIIDP LNVFWFGIGK ATVFLLPALI FAVKLAKYR RMDSEDVYDD VETIPKQME 840  
 NGNNGYHDKH VYGIENPVMT SPSQH

80 **DNA sequence 21**  
 Gene name: G protein-coupled receptor 39  
 Unigene number: Hs.85339  
 Nucleic Acid Accession #: NM\_001508  
 Coding sequence: 1-1362

	1	11	21	31	41	51	
	ATGGCTTCAC	CCAGCCTCCC	GGGCACTGAC	TGCTCCCAAA	TCATTGATCA	CAGTCATGTC	60
	CCCGAGTTTG	AGGTGGCCAC	CTGGATCAAA	ATCACCTTTA	TTCTGGTGTG	CCTGATCATC	120
5	TTCTGTATGG	GCCTTCTGGG	GAACAGCGCC	ACCATTCGGG	TCACCCAGGT	GCTGCAGAA	180
	AAAGGATACT	TGCAGAAAGG	GGTACAGAC	CACATGGTGA	GTTTGGCTTG	CTCGGACATC	240
	TTGGTGTTC	TCATCGGCAT	GCCATGGAG	TTCTACAGCA	TCATCTGGAA	TCCCTGACC	300
	ACGTCCAGCT	ACACCTGTCT	CTGCAAGCTG	CACACTTTCC	TCCTCGAGGC	CTGCAGCTAC	360
10	GTACAGCTGC	TGACGTGTCT	GACACTCAGC	TTTGAGCGCT	ACATCGCCAT	CTGTACCCCC	420
	TTCAAGTACA	AGCTGTGTCT	GGGACCTTGC	CAGGTGAAGC	TGCTGATTGG	CTTCGTCTGG	480
	GTACACCTCG	CCCTGGTGGC	ACTGCCCTTG	CTGTTTGCCA	TGGGTACTGA	GTACCCCTTG	540
	GTGAAGCTGC	CCAGCCACCG	GGGTCTCACT	TGCAACCGCT	CCAGCACCGC	CCACCAAGAG	600
	CAGCCCGAGA	CTCCAATAT	GTCCAATCTG	ACCAACCTCT	CCAGCCGCTG	GACCGTGTTC	660
	CAGTCCAGCA	TCTTGGCGCG	CTTGTGGTCT	TACCTCGTGG	TCCTGCTCTC	CGTAGCCTTC	720
15	ATGTGCTGGA	ACATGATGCA	GGTGCTCATG	AAAAGCCAGA	AGGGCTCGCT	GGCCGGGGGC	780
	ACGCGGCTCT	CGCAGCTGAG	GAAGTCCGAG	AGCGAAGAGA	GCAGGACCGC	CAGGAGCCAG	840
	ACCATCATCT	TCTGAGGCT	GATTGTGTGT	ACATTGGCCG	TATGCTGGAT	GCCCAACCA	900
	ATTGCGAGGA	TCATGGCTGC	GGCCAAACCC	AAGCAGCACT	GCACGAGGTC	CTACTTCCGG	960
20	GGGTACATGA	TCTCTCTCCC	CTTCTCGGAG	ACGTTTTTCT	ACCTCAGCTC	GGTCATCAAC	1020
	CGCTCTCTGT	ACACGGTGTG	CTCGCAGCAG	TTTGGCGGGG	TGTTCTGTGA	GGTCTGTGTC	1080
	TGCCCGCTGT	CGCTCGCAGA	CGCCAAACCAC	GAGAAAGCGC	TGCGCGTACA	TGCGCACTCC	1140
	ACCAACGACA	CGCCCGCTTT	TGTGAGCGCG	CCGTGTCTCT	TGCGCTCCCG	GCGCCAGTCC	1200
	TCTGCAAGGA	GAACTAGAGAA	GATTTTCTTA	AGCACTTTTC	AGAGCGAGGC	CGAGCCCCAG	1260
25	TCTAAGTCCC	AGTCATTGAG	TCTGAGTCA	TAGAGCCCA	ACTCAGGCGC	GAAACAGCC	1320
	AATTCTGCTG	CAGAGAAATGG	TTTTCAGGAG	CATGAAGTTT	GA		

## Protein sequence 21

Gene name: G protein-coupled receptor 39

Unigene number: Hs.85339

Protein Accession #: NM\_001508, NP\_001409

Signal sequence: none found

Pfam domains: 7tm\_1 [72-172, 224-344]

Transmembrane domains: 32-54, 68-90, 111-133, 151-173, 221-243, 280-301, 320-342

Cellular Localization: plasma membrane

	1	11	21	31	41	51	
	MASPSLPQSD	CSQIIDHSRV	PEPEVATWIK	ITLILVYLII	FVMGLLGNSA	TIRVTQVLQK	60
	KOYLQKEVD	BMVSLACSDI	LVFLIGMPME	FYSIIMNPLT	TSSYTLCKSL	HTFLPEACSY	120
40	ATLLHVLRLS	FERYIAICHP	FRYKAVSGPC	QVKLLIGFVN	VTSALVALPL	LPAMGTEYPL	180
	VNVPFHRGLT	CNRSSTRHHE	QPSTSNMSIC	TNLSSRMTPV	QSSIFGAPVV	YLVVLLSVAF	240
	MCVNMQVLM	KSKGSLAAG	TRPPQLRKSE	SEBSRTARRQ	TIIPLRLIVV	TLAVCMMPNQ	300
	IRRIIMAAKP	KHDWTRRYFR	AYMILLPFSE	TFPYLSSVIN	PLLYTVSSQO	FRRVVFQVLC	360
	CRLSLQHANH	EKRLRVHAHS	TTDSARFVQR	PLLFSRRQRS	SARRTEKIFL	STFQSBAPDQ	420
45	SKSQSLSLSE	LEPNSGAKPA	NSAAENGFBQ	HEV			

TABLE 8A: ABOUT 1260 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 8A lists about 1260 genes up-regulated in glioblastoma compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu30 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult tissues was greater than or equal to 2.5. The "average" glioblastoma level was set to the 75th percentile amongst various glioblastoma tumors. The "average" normal adult tissue level was set to the 85th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst the non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigeneID: Unigene number

Unigene Title: Unigene gene title

R1: Ratio of 75th percentile tumor to 85th percentile normal body tissue

	Pkey	ExAccn	UnigeneID	Unigene Title	R1
60	431917	D16181	Hs.2868	peripheral myelin protein 2	75.2
	427343	A1880044	Hs.176977	protein kinase C binding protein 2	74.6
	455601	A1368680	Hs.816	SRY (sex determining region Y)-box 2	74.2
	428321	A1699994	Hs.2868	peripheral myelin protein 2	71.6
65	412719	AW016610	Hs.129911	ESTs	70.7
	449494	AW237014	Hs.315369	Homo sapiens cDNA: FLJ23075 fis, clone L	68.3
	415817	U88987	Hs.78867	protein tyrosine phosphatase, receptor-t	64.3
	413472	BE242870	Hs.75379	solute carrier family 1 (glut high eff)	60.1
	456759	BE259150	Hs.127792	delta (Drosophila)-like 3	52.3
70	435147	AL133731	Hs.4774	Homo sapiens mRNA: cDNA DKFZp761C1712 (f	46.7
	425842	A1587490	Hs.169623	NIK-2 (Drosophila) homolog B	40.1
	412733	AA984472	Hs.74554	KIAA0080 protein	39.0
	418375	NM_003081	Hs.84389	synaptosomal-associated protein, 25kD	38.7
	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	37.2
75	423849	AL157425	Hs.133315	Homo sapiens mRNA: cDNA DKFZp781J1324 (f	36.8
	413333	M74028	Hs.75297	fibroblast growth factor 1 (acidic)	32.8
	416829	AB013805	Hs.80220	catenin (cadherin-associated protein), d	31.8
	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fis, clone CO	31.8
	436878	BE465204	Hs.47448	ESTs	31.4
80	426325	D28114	Hs.169309	myelin-associated oligodendrocyte basic	30.9
	425057	AA826434	Hs.1619	echinocyte-scurf complex (Drosophila) homol	30.4
	445711	AF169692	Hs.12450	protocadherin 9	30.2
	439415	F05538	Hs.12825	ESTs	28.3
	430838	N46884	Hs.169395	hypothetical protein FLJ12015	26.9

	429466	M85835	Hs.12827	ESTs	25.9
	447004	AW296968	Hs.157539	ESTs	25.3
	424581	M62062	Hs.150917	catenin (cadherin-associated protein), a	24.8
	452744	A1267652	Hs.30504	Homo sapiens mRNA; cDNA DKFZp434E082 (fr	24.8
5	441285	NM_002374	Hs.167	microtubule-associated protein 2	24.3
	453642	A1370936	Hs.34074	dipeptidylpeptidase VI	24.3
	424140	Z48051	Hs.141308	myelin oligodendrocyte glycoprotein	24.2
	450133	AW969789	Hs.105201	ESTs	24.2
	408562	A436323	Hs.31141	Homo sapiens mRNA for KIAA1568 protein,	23.3
10	448672	A1955511	Hs.225106	ESTs	22.7
	435708	A1362949	Hs.75169	ESTs	22.0
	407034	U84540		gbc:Human dystrobrein isoform DTN-3 (DTN	21.9
	407188	R45175	Hs.117183	ESTs	21.7
	431019	NM_005249	Hs.2714	forkhead box G1B	21.5
15	409049	A1423132	Hs.146343	ESTs	21.4
	433896	AW294729	Hs.274461	ESTs	21.1
	445041	T64183	Hs.282982	solute carrier	21.0
	418738	AW388633	Hs.6682	solute carrier family 7, (cationic amino	20.4
20	444378	R41339	Hs.12569	ESTs	20.0
	411305	BE241596	Hs.69547	myelin basic protein	19.9
	437414	AW894071	Hs.48448	hypothetical protein DKFZp547C176	19.8
	441016	AW138653	Hs.25845	ESTs	19.6
	440435	AL042201	Hs.21273	transcription factor NYD-sp10	18.6
	438209	AL120659	Hs.6111	aryl-hydrocarbon receptor nuclear trans	18.4
25	452461	N78223	Hs.108106	transcription factor	18.1
	409395	U48745	Hs.54433	dystrobrein, alpha	18.1
	417183	R52089	Hs.172717	ESTs	18.0
	409638	AW450420	Hs.21335	ESTs	18.0
	428392	H10233	Hs.2265	secretory granule, neuroendocrine protei	18.0
30	449611	A1970394	Hs.197075	ESTs	17.0
	446692	Z44514	Hs.156829	Homo sapiens mRNA for KIAA1763 protein,	16.9
	425088	AA663372	Hs.169395	hypothetical protein FLJ12015	16.9
	444471	AB020684	Hs.11217	KIAA0877 protein	16.8
	421659	NM_014459	Hs.106511	protocadherin 17	16.7
35	431725	X65724	Hs.2839	Norrie disease (pseudoglioma)	16.6
	429276	AF066085	Hs.198612	G protein-coupled receptor 51	16.6
	416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	16.5
	441440	A1807981	Hs.30495	ESTs	15.7
40	449433	A1672095	Hs.9012	ESTs, Weakly similar to S26650 DNA-bind	15.7
	421264	AL039123	Hs.103042	microtubule-associated protein 1B	15.5
	415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	15.3
	413597	AW302885	Hs.117183	ESTs	15.1
	424945	A1221919	Hs.173438	hypothetical protein FLJ10582	14.9
45	447414	D82343	Hs.18551	neuroblastoma (nerve tissue) protein	14.9
	426269	H15302	Hs.168950	Homo sapiens mRNA; cDNA DKFZp566A1046 (f	14.8
	416857	AA188775	Hs.292453	ESTs	14.7
	419721	NM_001650	Hs.286650	aquaporin 4	14.6
	411078	A1222020	Hs.182364	CocoaCrisp	14.4
50	453924	R48295	Hs.24886	ESTs	14.4
	409389	AB007979	Hs.301281	Homo sapiens mRNA, chromosome 1 specific	14.3
	430130	AL137311	Hs.234074	Homo sapiens mRNA; cDNA DKFZp761G02121 (	14.1
	410909	AW898161	Hs.53112	ESTs, Moderately similar to ALU8_HUMAN A	14.0
	412266	N59006	Hs.26133	ESTs	14.0
55	412986	X81120	Hs.75110	cannabinoid receptor 1 (brain)	14.0
	424790	AL119344	Hs.13326	ESTs, Weakly similar to 2004399A chromos	14.0
	439239	AJ031540	Hs.235331	ESTs	14.0
	441497	R51084	Hs.23172	ESTs	14.0
	445495	BE622641	Hs.38489	ESTs, Weakly similar to I38022 hypotheti	14.0
60	414245	BE148072	Hs.75850	WAS protein family, member 1	13.7
	428900	AA460421	Hs.30875	ESTs	13.6
	448595	AB014544	Hs.21572	KIAA0644 gene product	13.6
	449605	AW138581	Hs.198416	ESTs	13.6
	452526	W38537	Hs.280740	hypothetical protein MGC3040	13.6
65	420547	AF155140	Hs.98738	gonadotropin-regulated testicular RNA he	13.3
	441350	AB020680	Hs.7782	paraneoplastic antigen MA2	13.3
	420077	AW512260	Hs.87767	ESTs	13.2
	424120	T80579	Hs.290270	ESTs	13.2
	456965	AW131888	Hs.172782	ESTs, Weakly similar to hypothetical pro	13.2
70	423361	AW170055	Hs.47628	ESTs	13.1
	428409	AW117207	Hs.98523	ESTs	12.9
	417160	N76497	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	12.6
	451621	A1879148	Hs.26770	fatty acid binding protein 7, brain	12.5
	411379	A1816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	12.5
75	436954	AA740151	Hs.130425	ESTs	12.4
	430691	C14187	Hs.103538	ESTs	12.4
	433551	A1985544	Hs.12450	protocadherin 9	12.4
	422544	AB018259	Hs.118140	KIAA0718 gene product	12.2
	427540	R12014	Hs.20976	ESTs	12.1
80	435624	AF218942	Hs.24889	formin 2	12.1
	415849	R20529	Hs.6806	ESTs	12.1
	428845	AL157579	Hs.153610	KIAA0751 gene product	11.9
	442571	AJ006668	Hs.134779	EST	11.9
	444396	T65213	Hs.4257	ESTs	11.8

	452752	AW044058	Hs.33578	KIAA0820 protein	11.8
	425523	AB007948	Hs.158244	KIAA0479 protein	11.8
	416072	AL110370	Hs.79000	growth associated protein 43	11.7
5	440184	AB002297	Hs.7022	dedicator of cyto-kinesis 3	11.7
	428976	AL037624	Hs.194695	ras homolog gene family, member I	11.6
	444783	AK001468	Hs.82180	enfilin (Drosophila Scraps homolog), act	11.6
	448299	AA497044	Hs.20887	hypothetical protein FLJ10392	11.6
	414214	D49958	Hs.75819	glycoprotein MGA	11.5
10	428982	NM_005097	Hs.194704	leucine-rich, glioma inactivated 1	11.5
	405238				11.4
	420362	U79734	Hs.97206	huntingtin interacting protein 1	11.4
	422980	N46569	Hs.76722	OCAAT/enhancer binding protein (C/EBP),	11.4
	424918	R13982	Hs.169309	myelin-associated oligodendrocyte basic	11.4
	434277	X77748	Hs.3786	glutamate receptor, metabotropic 3	11.4
15	451952	AL120173	Hs.301683	ESTs	11.3
	408829	NM_006042	Hs.48384	heparan sulfate (glucosamine) 3-O-sulfot	11.3
	424278	AK000723	Hs.144517	hypothetical protein FLJ20716	11.3
	429418	AI381028	Hs.118769	ESTs	11.3
	429918	AW873986	Hs.118383	ESTs	11.3
20	443912	R37257	Hs.184780	ESTs	11.3
	448743	AB032962	Hs.21896	KIAA1136 protein	11.3
	420092	AA814043	Hs.88045	ESTs	11.2
	409081	AW451597	Hs.167409	ESTs	11.2
25	411642	NM_014932	Hs.71132	neurotigin 1	10.9
	415170	R44388	Hs.164578	ESTs	10.9
	426320	W47595	Hs.169300	transforming growth factor, beta 2	10.8
	450568	AL050078	Hs.25159	Homo sapiens cDNA FLJ10784 fs, clone NT	10.8
	425799	T08133	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,	10.8
30	423853	AB011537	Hs.133466	slit (Drosophila) homolog 1	10.7
	400293	NS1002	Hs.306480	Homo sapiens mRNA; cDNA DKFZp761E2112 (I	10.7
	447773	AI423930	Hs.36790	ESTs, Weakly similar to putative p150 (H	10.7
	448321	NM_005883	Hs.20912	adenomatous polyposis coli like	10.5
	448533	AL119710	Hs.21365	nucleosome assembly protein 1-like 3	10.5
35	440684	AI253123	Hs.127358	ESTs, Highly similar to S21424 nestin (H	10.3
	444017	U04840	Hs.214	neuro-oncological ventral antigen 1	10.3
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	10.3
	440471	AA886146	Hs.307944	ESTs	10.2
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	10.1
40	439978	BE139460	Hs.124873	Homo sapiens cDNA FLJ11477 fs, clone HE	10.1
	448902	Z45998	Hs.22543	Homo sapiens mRNA; cDNA DKFZp76111912 (I	10.1
	424932	R14070	Hs.315369	Homo sapiens cDNA: FLJ23075 fs, clone L	9.9
	431721	AB032996	Hs.268044	KIAA1170 protein	9.9
	419088	AI538323	Hs.52620	integrin, beta 8	9.8
45	420602	AF060877	Hs.99236	regulator of G-protein signalling 20	9.8
	436511	AA721252	Hs.291502	ESTs	9.8
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	9.7
	449539	W80363	Hs.58446	ESTs	9.7
	412959	D87458	Hs.75090	KIAA0282 protein	9.6
50	412811	H06382	Hs.21400	ESTs	9.6
	449300	AI656959	Hs.222165	ESTs	9.6
	426344	H41821	Hs.322469	transcriptional activator of the c-fos p	9.5
	419271	N34901	Hs.238532	ESTs	9.5
	419078	M93119	Hs.89584	insulinoma-associated 1	9.4
55	451516	AI800515	Hs.12024	ESTs	9.4
	422656	AI870435	Hs.1569	LIM homeobox protein 2	9.3
	449318	AW236021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	9.3
	414175	AI308876	Hs.103849	hypothetical protein DKFZp761D112	9.3
	415279	F04237	Hs.1447	glial fibrillary acidic protein	9.2
60	428784	Y12851	Hs.193470	purinergic receptor P2X, ligand-gated to	9.2
	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su	9.2
	424641	AB001106	Hs.151413	glia maturation factor, beta	9.1
	417435	NM_005161	Hs.82129	carbonic anhydrase III, muscle specific	9.1
	449448	D60730	Hs.57471	ESTs	9.1
65	408508	AI806109	Hs.135738	KIAA1580 protein	9.0
	452785	AL359942	Hs.296434	erythroid differentiation and dendrocell	9.0
	448986	H42169	Hs.18653	hypothetical protein FLJ14627	8.9
	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	8.9
	433800	AI034361	Hs.135150	lung type-I cell membrane-associated gly	8.9
	408926	AF217525	Hs.49002	Down syndrome cell adhesion molecule	8.8
70	449625	NM_014253	Hs.23796	odt (odd Oz/ten-m, Drosophila) homolog 1	8.8
	400282	AA250737	Hs.72472	ESTs	8.7
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	8.7
	420345	AW295230	Hs.25231	ESTs	8.7
75	429927	NM_001115	Hs.2522	adenylate cyclase 8 (brain)	8.7
	437528	N59648	Hs.169745	crumbs (Drosophila) homolog 1	8.7
	440152	AB002376	Hs.7008	KIAA0378 protein	8.7
	451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	8.6
	400780				8.6
80	434891	AA814309	Hs.123583	ESTs	8.6
	449277	AA001064	Hs.172976	ESTs	8.6
	415709	AA849850	Hs.278558	ESTs	8.5
	439947	AB005627	Hs.6788	astrotactin	8.5
	447197	R36075		ghyt88b01.s1 Soares placenta Nb2HP Homo	8.5

5	433042	AW193534	Hs.281895	Homo sapiens cDNA FLJ11660 fls, clone HE	8.4
	416370	N90470	Hs.203697	ESTs, Weakly similar to I38022 hypotheti	8.4
	452786	R61352	Hs.106642	ESTs, Weakly similar to T09052 hypotheti	8.4
	415796	R87548	Hs.78854	ATPase, Na+/K+ transporting, beta 2 poly	8.3
	426271	AF026547	Hs.169047	chondroitin sulfate proteoglycan 3 (neur	8.3
	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKFZp584N1682 (f	8.3
	419863	AW952691	Hs.93485	Homo sapiens mRNA; cDNA DKFZp761D181 (fr	8.3
	433447	U29195	Hs.3281	neuronal pentraxin II	8.3
10	431467	N71831	Hs.256398	Homo sapiens mRNA; cDNA DKFZp434E0528 (f	8.3
	409327	L41162	Hs.53563	collagen, type IX, alpha 3	8.3
	414300	AI304870	Hs.186680	ESTs	8.2
	407728	AW071502	Hs.175931	ESTs	8.2
	422798	R92347	Hs.34574	ESTs, Weakly similar to ALU1_HUMAN ALU S	8.2
15	419704	AA429104	Hs.45057	ESTs	8.2
	429007	D80642		gb:HUM092E09B Human fetal brain (TFujiwa	8.1
	442710	AI015631	Hs.23210	ESTs	8.1
	425048	H05468	Hs.164502	ESTs	8.1
	429149	AW193360	Hs.197982	ESTs, Weakly similar to I38022 hypotheti	8.0
20	445740	T78281	Hs.13226	Homo sapiens clone 25181 mRNA sequence	8.0
	418771	AA807881	Hs.25329	ESTs	7.9
	422728	AW937826	Hs.103262	ESTs, Weakly similar to ZN91_HUMAN ZINC	7.9
	425984	AW636277	Hs.165636	hypothetical protein DKFZp761C07121	7.9
	448408	AA322866	Hs.21107	neurotigin	7.9
25	455384	H72178	Hs.4273	hypothetical protein FLJ13159	7.9
	446819	AA076843	Hs.313	secreted phosphoprotein 1 (osteopontin,	7.9
	435501	AW051819	Hs.128908	KIAA0591 protein	7.8
	423600	AI633559	Hs.310359	ESTs	7.8
	450625	AW970107		gb:EST382188 MAGE resequences, MAGK Homo	7.8
30	415314	N88802	Hs.5422	glycoprotein M5B	7.7
	420036	R60336	Hs.52792	Homo sapiens mRNA; cDNA DKFZp58611823 (f	7.7
	427687	AW003867	Hs.1570	histamine receptor H1	7.7
	449328	AI982493	Hs.197847	ESTs	7.7
	419249	X14767	Hs.89768	gamma-aminobutyric acid (GABA) A recepto	7.7
35	407896	D76435	Hs.41154	Zic family member 1 (odd-paired Drosophi	7.7
	419103	Z40229	Hs.95423	hypothetical protein FLJ23033	7.6
	438779	NM_003787	Hs.6414	nucleolar protein 4	7.6
	433532	AW976367		gb:EST387475 MAGE resequences, MAGN Homo	7.6
40	448555	AI536697	Hs.159863	ESTs	7.5
	439662	H97552	Hs.269060	ESTs	7.5
	448543	AW897741	Hs.21380	Homo sapiens mRNA; cDNA DKFZp586P1124 (f	7.5
	410099	AA081630	Hs.169387	KIAA0036 gene product	7.5
	431592	R69016	Hs.213194	hypothetical protein MGC10895	7.4
	408731	AA125985	Hs.56145	thymosin, beta, identified in neuroblast	7.4
45	405819			ESTs	7.4
	407886	AW969688	Hs.100826	ESTs	7.4
	437416	AL359605	Hs.268851	Homo sapiens mRNA; cDNA DKFZp547G038 (fr	7.4
	437698	R61837	Hs.7990	ESTs, Moderately similar to I84505 calci	7.4
	408604	D51408	Hs.21925	ESTs	7.4
50	418506	AA084248	Hs.85339	G protein-coupled receptor 39	7.3
	447499	AW262580	Hs.147674	protocadherin beta 16	7.3
	454036	AA374766	Hs.93560	Homo sapiens mRNA for KIAA1771 protein,	7.3
	409746	NM_004794	Hs.56294	RAB33A, member RAS oncogene family	7.2
	410037	AB020725	Hs.58009	KIAA0918 protein	7.2
55	419318	AW969742	Hs.291005	ESTs	7.2
	424051	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (f	7.2
	442028	AI243749	Hs.8074	brain-specific angiogenesis inhibitor 3	7.2
	448243	AW369771	Hs.52620	Integrin, beta 8	7.2
	436281	AW411194	Hs.85195	myeloid leukemia factor 1	7.2
60	426429	X73114	Hs.169849	myosin-binding protein C, slow-type	7.2
	407182	AA312551	Hs.230157	ESTs	7.1
	415293	R49462	Hs.106541	ESTs	7.1
	422764	AI767727	Hs.47522	ESTs	7.1
	451592	AI805416	Hs.213897	ESTs	7.1
65	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	7.0
	415734	NM_014747	Hs.78748	KIAA0237 gene product	7.0
	434149	Z43829	Hs.19574	hypothetical protein MGC5469	7.0
	438726	AA324975	Hs.128993	ESTs, Weakly similar to T00079 hypotheti	7.0
	417632	R20855	Hs.5422	glycoprotein M5B	7.0
70	422421	AA325138	Hs.236873	hypothetical protein FLJ22672	6.9
	435267	N23797	Hs.110114	ESTs	6.9
	437117	AL049256	Hs.122593	ESTs	6.9
	445523	Z30118	Hs.293788	ESTs, Moderately similar to unnamed prot	6.9
	445900	AF070528	Hs.13429	Homo sapiens clone 24787 mRNA sequence	6.9
75	445745	AB007924	Hs.13245	KIAA0455 gene product	6.9
	424085	NM_002914	Hs.139228	replication factor C (activator 1) 2 (40	6.9
	428588	F12101	Hs.185701	Homo sapiens mRNA full length insert cDN	6.8
	421723	AA620400	Hs.300717	sodium channel, voltage-gated, type III,	6.8
	447342	AI199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	6.7
80	443297	AI049884	Hs.133029	ESTs	6.7
	443992	AW022228	Hs.322922	ESTs	6.7
	453096	AW294631	Hs.11325	ESTs	6.7
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	6.7
	443761	AI525743	Hs.160603	ESTs	6.6

5	429609	AF002246	Hs.210853	cell adhesion molecule with homology to	6.6
	435056	AW023337	Hs.5422	glycoprotein M68	6.5
	453431	AF094754	Hs.32973	glycine receptor, beta	6.5
	444190	AI878918	Hs.10526	cysteine and glycine-rich protein 2	6.5
	418110	R43523	Hs.217754	hypothetical protein FLJ22202	6.5
	413988	M81883	Hs.324784	glutamate decarboxylase 1 (brain, 67kD)	6.5
	420605	L10333	Hs.99947	reticulation 1	6.4
	429125	AA446854	Hs.271004	ESTs, Weakly similar to I38022 hypotheti	6.4
10	435256	AF193766	Hs.13872	cytokine-like protein C17	6.4
	407866	AW088232	Hs.89506	paired box gene 6 (antridia, keratitis)	6.3
	440700	AW952281	Hs.296184	guanine nucleotide binding protein (G pr	6.3
	427701	AA411101	Hs.243886	nuclear autoantigenic sperm protein (his	6.3
	422949	AA319435		gb:EST21657 Adrenal gland tumor Homo sap	6.2
15	445102	AW204610	Hs.22270	ESTs	6.2
	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	6.2
	435538	AB011540	Hs.4930	low density lipoprotein receptor-related	6.2
	410102	AW248508	Hs.279727	Homo sapiens cDNA FLJ14035 fis, clone HE	6.2
	416871	H98716		gb:yx13d08.s1 Soares melanocyte 2NbHM Ho	6.1
20	416702	AA186428	Hs.85591	ESTs	6.1
	418347	C15944	Hs.90005	superiorcervical ganglia, neural specif	6.1
	424997	AL138167	Hs.98920	ESTs	6.1
	438660	U95740	Hs.6349	Homo sapiens, clone IMAGE:3010666, mRNA,	6.1
	453649	Y07494	Hs.34114	ATPase, Na+/K+ transporting, alpha 2 (+)	6.1
25	449444	AW818436	Hs.23590	solute carrier family 16 (monocarboxylic	6.1
	414117	W88559	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	6.0
	425617	AF121179		gb:AF121179 Homo sapiens liver (Chang L-	6.0
	427457	AW779105	Hs.164682	ESTs	6.0
	437034	AA742643		gb:ny91cd01.s1 NCI_CGAP_GCB1 Homo sapiens	6.0
30	444170	AW613879	Hs.102408	ESTs	6.0
	457183	H91882	Hs.118569	Dvl-binding protein IDAX (inhibition of	6.0
	448999	AF179274	Hs.22791	transmembrane protein with EGF-like and	6.0
	454046	H05626	Hs.6921	ESTs	6.0
	439772	AL365406	Hs.10268	Homo sapiens mRNA full length insert cDN	5.9
35	448944	AB014605	Hs.22599	strophin-1 interacting protein 1; activi	5.9
	410011	AB020541	Hs.57856	PFTAIRE protein kinase 1	5.9
	415486	H12214	Hs.13284	ESTs, Weakly similar to 2109260A B cell	5.9
	438993	AA828995		gb:od77b08.s1 NCI_CGAP_Ov2 Homo sapiens	5.9
40	447350	AI375572	Hs.172634	ESTs	5.9
	451783	R42554	Hs.210862	T-box, brain, 1	5.9
	447101	N72185	Hs.44189	ESTs	5.9
	440492	R39127	Hs.21433	hypothetical protein DKFZp547J036	5.9
	440274	R24595	Hs.7122	scrapie responsive protein 1	5.9
	438461	AW075485	Hs.286049	phosphoserine aminotransferase	5.9
45	418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	5.8
	437036	AI571514	Hs.133022	ESTs	5.7
	412225	AW902042		gb:QV0-NN1022-170400-193-c02 NN1022 Homo	5.7
	426342	AF083419	Hs.169378	multiple PDZ domain protein	5.7
50	444218	AF070941	Hs.10684	Homo sapiens clone 24421 mRNA sequence	5.7
	445828	F05802	Hs.81907	ESTs	5.7
	447198	D61523	Hs.283435	ESTs	5.7
	427897	NM_017413	Hs.303084	apelin; peptide ligand for APJ receptor	5.7
	448499	BE613280	Hs.77550	hypothetical protein MGC1780	5.7
	443672	AA323362	Hs.9667	butyrobetaine (gamma), 2-oxoglutarate di	5.6
55	412155	R38167	Hs.12449	Homo sapiens transmembrane protein HTMP1	5.6
	435718	R06569	Hs.269534	ESTs	5.6
	449340	AW235786	Hs.195359	hypothetical protein MGC10954	5.6
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	5.6
60	451996	AW514021	Hs.245510	ESTs	5.6
	422411	AW749443	Hs.22511	ESTs	5.6
	438328	AI492281	Hs.32450	ESTs	5.6
	433244	AB040943	Hs.271285	KIAA1510 protein	5.6
	435191	R15912	Hs.4817	Homo sapiens clone 24461 mRNA sequence	5.5
	418677	S83308	Hs.87224	SRY (sex determining region Y)-box 5	5.5
65	400859				5.5
	413625	AW451103	Hs.71371	ESTs	5.5
	421863	AI952677	Hs.108972	Homo sapiens mRNA; cDNA DKFZp434P228 (tr	5.5
	434933	R91095	Hs.4276	KIAA1701 protein	5.5
	438702	AI879064	Hs.54618	ESTs	5.5
70	452055	AI377431	Hs.141693	hypothetical protein MGC10858	5.5
	430979	AI479755	Hs.129010	ESTs	5.5
	412709	AL022327	Hs.74518	KIAA0027 protein	5.5
	439920	H05430	Hs.288433	neurotrophin	5.5
	424343	AW956360	Hs.4748	adenylate cyclase activating polypeptide	5.4
75	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	5.4
	419235	AW470411	Hs.288433	neurotrophin	5.4
	418030	BE207573	Hs.83321	neuromedin B	5.4
	410330	AW023630	Hs.46786	ESTs	5.4
	410781	AI375672	Hs.165028	ESTs	5.4
80	420658	AW965216	Hs.336656	ESTs	5.4
	421308	AA687322	Hs.192843	leucine zipper protein FKSG14	5.4
	443740	R56434	Hs.21062	ESTs	5.4
	426457	AW894687	Hs.169965	chimerin (chimaerin) 1	5.4
	450375	AA009647	Hs.8850	a disintegrin and metalloproteinase doma	5.4

5	412494	AL133900	Hs.792	ADP-ribosylation factor domain protein 1	5.4
	426600	NM_003378	Hs.171014	VEGF nerve growth factor inducible	5.4
	424432	AB037821	Hs.146858	protocadherin 10	5.4
	429250	HS6585	Hs.198308	tryptophan rich basic protein	5.4
	443785	AW449952	Hs.190125	basic-helix-loop-helix-PAS protein	5.4
	436282	R91913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	5.4
	404584				5.3
	430091	AB032958	Hs.233023	KIAA1132 protein	5.3
10	439845	AL355743	Hs.56663	Homo sapiens EST from clone 41214, full	5.3
	424001	W67883	Hs.137476	paternally expressed 10	5.3
	425073	W39609	Hs.22003	solute carrier family 8 (neurotransmitter)	5.3
	426525	T78300	Hs.300642	serologically defined colon cancer antigen	5.3
	428137	AA421792	Hs.170999	ESTs	5.3
15	428879	AA431765		gb:zw80c03.s1 Soares_testis_NHT Homo sap	5.3
	438176	AW138970	Hs.122113	ESTs	5.3
	440138	AB033023	Hs.318127	hypothetical protein FLJ10201	5.3
	451018	AW955599	Hs.247324	mitochondrial ribosomal protein S14	5.3
	416340	N31772	Hs.79226	fasciculation and elongation protein 2et	5.3
	435244	N77221	Hs.187824	ESTs	5.3
20	446035	NM_006558	Hs.13585	Sam68-like phosphotyrosine protein, T-ST	5.3
	442624	AB032947	Hs.151301	Ca2+-dependent activator protein for sec	5.3
	407748	AL079409	Hs.38176	KIAA0606 protein; SCN Circadian Oscillator	5.3
	430437	AF768801	Hs.169943	Homo sapiens cDNA FLJ13569 fs, clone PL	5.3
25	414825	X06370	Hs.77432	epidermal growth factor receptor (avian)	5.2
	453941	U39817	Hs.36820	Bloom syndrome	5.2
	424998	U58515	Hs.154138	chitinase 3-like 2	5.2
	423419	R55336	Hs.23539	ESTs	5.2
	424922	BE386547	Hs.217112	hypothetical protein MGC10825	5.2
30	447359	NM_012093	Hs.18268	adenylate kinase 5	5.2
	408206	AF041853	Hs.43670	kinesin family member 3A	5.2
	421013	M62397	Hs.1345	mutated in colorectal cancers	5.2
	429443	AB028967	Hs.202687	potassium voltage-gated channel, Shal-re	5.2
	434367	AB020700	Hs.3830	KIAA0893 protein	5.2
35	444861	R46789	Hs.76118	ubiquitin carboxyl-terminal esterase L1	5.2
	446142	AI754693	Hs.145968	ESTs	5.2
	448816	AB033052	Hs.22151	KIAA1226 protein	5.2
	451050	AW937420	Hs.69662	ESTs	5.2
	451108	BE382701	Hs.25960	v-myc avian myelocytomatosis viral related	5.2
40	439285	AL133916	Hs.172572	hypothetical protein FLJ20093	5.2
	416737	AF154335	Hs.79691	LIM domain protein	5.2
	424800	AL035588	Hs.153203	MyoD family inhibitor	5.2
	443695	AW204099	Hs.337720	ESTs, Weakly similar to AF126780 1 retin	5.2
	415257	F03016	Hs.27513	ESTs	5.2
45	433929	AI375499	Hs.27379	ESTs	5.1
	415851	AI207162	Hs.3815	stathmin-like-protein RB3	5.1
	451027	AW519204	Hs.40808	ESTs	5.1
	409172	Z89398	Hs.118145	ESTs	5.1
	423343	AA324643	Hs.246106	ESTs	5.1
50	429172	AA447417	Hs.285491	ESTs	5.1
	437268	AI754847	Hs.227571	regulator of G-protein signaling 4	5.1
	451270	AW341392	Hs.235795	ESTs	5.1
	452904	AI157581	Hs.30957	Homo sapiens mRNA; cDNA DKFZp434E0826 (f	5.1
	420560	AW207748	Hs.59115	ESTs	5.1
55	418097	R45137	Hs.21868	ESTs	5.1
	442910	AI365130	Hs.11307	ESTs, Weakly similar to T19328 hypotheti	5.1
	434849	AW292765	Hs.8053	ESTs	5.1
	413554	AA319148	Hs.75426	secretogranin II (chromogranin C)	5.1
	414217	AI309288	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	5.1
60	412068	S72043	Hs.73133	metallothionein 3 (growth inhibitory fac	5.0
	413627	BE182082	Hs.246973	ESTs	5.0
	418661	NM_001949	Hs.1189	E2F transcription factor 3	5.0
	422438	AA445925	Hs.270896	ESTs, Moderately similar to Z195_HUMAN Z	5.0
	423728	AW891294	Hs.132136	solute carrier family 4, sodium bicarbon	5.0
	431431	AL096711	Hs.252953	Human DNA sequence from clone RP3-403A15	5.0
65	435087	AW975241	Hs.23567	ESTs	5.0
	452097	AB002364	Hs.27916	a disintegrin-like and metalloprotease (	5.0
	410434	AF051152	Hs.63668	tdr-like receptor 2	4.9
	408692	AL040127	Hs.34074	dipeptidylpeptidase VI	4.9
70	407808	AA663559	Hs.279789	histone deacetylase 3	4.9
	418940	H17739	Hs.288513	Human DNA sequence from clone RP5-899C14	4.9
	425977	R15138	Hs.165570	Homo sapiens clone Z5052 mRNA sequence	4.9
	426814	AF036943	Hs.172619	myelin transcription factor 1-like	4.9
	447112	H17800	Hs.7154	ESTs	4.9
	449574	F05048	Hs.175373	ESTs	4.9
75	453652	AW009640	Hs.28368	ESTs, Moderately similar to S65657 alpha	4.9
	423869	BE409301	Hs.134012	C1q-related factor	4.9
	413248	T64858	Hs.21433	hypothetical protein DKFZp547J036	4.9
	449176	AI633545	Hs.198072	ESTs	4.9
80	448451	AW015994		gb:U1-H-B10p-ab1h-g-09-0-U1.s1 NCI_CGAP_S	4.8
	402604				4.8
	436039	AW023323	Hs.121070	ESTs	4.8
	448769	N66037	Hs.38173	ESTs	4.8
	423678	AW963357	Hs.7847	ESTs	4.8



	439451	AF088270	Hs.278554	heterochromatin-like protein 1	4.8
	425870	R13408	Hs.56782	ESTs	4.8
	408777	U71204	Hs.47626	Ric (Drosophila)-like, expressed in neur	4.8
	413409	AI638418	Hs.78580	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	4.8
5	413623	AA826721	Hs.246973	ESTs	4.8
	417246	AI760098	Hs.21411	ESTs	4.8
	420900	AL045633	Hs.44269	ESTs	4.8
	424153	AA451737	Hs.141496	MAGE-like 2	4.8
	443539	AI076182	Hs.134074	ESTs, Moderately similar to ALU6_HUMAN A	4.8
10	448750	U95020	Hs.21903	calcium channel, voltage-dependent, beta	4.8
	454030	AW021429	Hs.231980	ESTs	4.8
	424458	M29273	Hs.1780	myelin associated glycoprotein	4.8
	444119	R41231	Hs.184261	ESTs, Weakly similar to T26686 hypotheti	4.8
	407792	AI077715	Hs.39384	putative secreted ligand homologous to f	4.8
15	431462	AW583672	Hs.255311	granin-like neuroendocrine peptide precu	4.7
	431103	M57399	Hs.44	pleiotrophin (heparin binding growth fac	4.7
	429566	AI374651	Hs.22542	ESTs	4.7
	435060	AI422719	Hs.233349	ESTs, Weakly similar to fork head like p	4.7
	438203	BE384982	Hs.5076	Homo sapiens cDNA: FLJ22128 fs, clone H	4.7
20	448475	BE613134	Hs.247474	hypothetical protein FLJ21032	4.7
	422222	AI699372	Hs.193247	hypothetical protein DKFZp434A171	4.7
	431733	AW288410	Hs.21475	ESTs	4.7
	449353	AA001220	Hs.271369	ESTs	4.7
	452022	AW072330	Hs.293875	ESTs	4.7
25	464269	AI961060	Hs.129908	KIAA0591 protein	4.7
	404541				4.7
	428189	AA424030	Hs.46827	ESTs	4.7
	409126	R17268	Hs.259873	axonal transport of synaptic vesicles	4.7
	458435	AA18718	Hs.144121	ESTs, Weakly similar to T46916 hypotheti	4.6
30	425745	U44060	Hs.14427	Homo sapiens cDNA: FLJ21800 fs, clone H	4.6
	413492	D87470	Hs.75400	KIAA0280 protein	4.6
	419629	AB020695	Hs.91662	KIAA0888 protein	4.6
	407638	AI404672	Hs.334483	hypothetical protein FLJ23571	4.6
	436140	W87355	Hs.269587	ESTs	4.6
35	439169	AI912122	Hs.41095	ESTs	4.6
	443150	AI034467	Hs.34650	ESTs	4.6
	451073	AI758905	Hs.206053	ESTs	4.6
	451659	BE379761	Hs.14248	ESTs	4.6
	452106	AI141031	Hs.21342	ESTs	4.6
40	451407	AA131376	Hs.326401	fibroblast growth factor 12B	4.6
	448765	R15337	Hs.21958	Homo sapiens mRNA; cDNA DKFZp547D088 (tr	4.6
	430147	R60704	Hs.234434	hair/enhancer-of-split related with YRP	4.6
	437204	AL110218	Hs.12285	ESTs, Weakly similar to I55214 salivary	4.6
	431117	AF003522	Hs.250600	delta (Drosophila)-like 1	4.5
45	422175	N79885	Hs.6382	ESTs, Highly similar to T00391 hypotheti	4.5
	407889	R34556	Hs.30800	ESTs, Weakly similar to S65657 alpha-1C-	4.5
	419343	AA456245	Hs.85603	down-regulated by Cnnb1, a	4.5
	421790	AW898201	Hs.22654	sodium channel, voltage-gated, type I, a	4.5
	429399	AA452244	Hs.16727	ESTs	4.5
50	450149	AW969781	Hs.132863	Zic family member 2 (odd-paired Drosophi	4.5
	453118	AW195849	Hs.252757	ESTs	4.5
	443455	AB001025	Hs.9349	ryanodine receptor 3	4.4
	442613	AI004002	Hs.130522	Kv channel-interacting protein 1	4.4
	429643	AA455889	Hs.167279	FYVE-finger-containing Rab5 effector pro	4.4
55	418209	AA238776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	4.4
	418846	AA852985	Hs.89232	chromobox homolog 5 (Drosophila HP1 alph	4.4
	435202	AI971313	Hs.170204	KIAA0551 protein	4.4
	437496	AA452378	Hs.170144	Homo sapiens mRNA; cDNA DKFZp547J125 (tr	4.4
	451254	AI571016	Hs.172967	ESTs	4.4
60	439039	AI658707	Hs.48713	ESTs	4.4
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	4.4
	441607	NM_005010	Hs.7912	neuronal cell adhesion molecule	4.4
	424983	AI742434	Hs.169911	ESTs	4.4
	410611	AW954134	Hs.20924	KIAA1628 protein	4.4
65	402606				4.4
	409248	AB033035	Hs.51965	KIAA1209 protein	4.4
	442222	AI081301	Hs.164773	ESTs	4.4
	454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	4.4
70	454293	H49739	Hs.134013	ESTs, Moderately similar to HK61_HUMAN H	4.4
	442832	AW206560	Hs.253569	ESTs	4.4
	407304	AA565832		gbnj32b03.s1 NCL_CGAP_AA1 Homo sapiens	4.4
	423279	AW959861	Hs.290943	ESTs	4.3
	427194	AA399018	Hs.250835	ESTs	4.3
	419723	AL120193	Hs.92614	longevity assurance (LAG1, S. cerevisiae	4.3
75	445810	AW265700	Hs.155660	ESTs	4.3
	409734	BE181884	Hs.56155	hypothetical protein	4.3
	410389	AW954049	Hs.8177	ESTs, Weakly similar to PIHUB6 salivary	4.3
	411571	AA122393	Hs.70811	hypothetical protein FLJ20516	4.3
	433024	AA573847	Hs.26549	KIAA1708 protein	4.3
80	453202	AW085781	Hs.26270	hypothetical protein FLJ11588	4.3
	425264	AA353953	Hs.20369	ESTs, Weakly similar to gonadotropin ind	4.3
	416427	BE244050	Hs.79307	Rac/Cdc42 guanine exchange factor (GEF)	4.3
	431789	H19500	Hs.269222	mitogen-activated protein kinase 4	4.3

	444600	R41398	Hs.6996	ESTs	4.3
	454042	H22570	Hs.172572	hypothetical protein FLJ20093	4.3
	441899	AJ372588	Hs.8022	TU3A protein	4.3
	425256	BE297611	Hs.155392	collapsin response mediator protein 1	4.3
5	410358	AW975168	Hs.13337	ESTs, Weakly similar to unnamed protein	4.2
	430291	AV660345	Hs.238126	CGI-49 protein	4.2
	433597	AA708205	Hs.100343	ESTs	4.2
	444127	N63820	Hs.13281	ESTs	4.2
10	448507	AL133109	Hs.21333	Homo sapiens mRNA; cDNA DKFZp566N1047 (f	4.2
	413589	AW452631	Hs.313803	ESTs, Highly similar to AF157833.1 noncl	4.2
	408577	H50572	Hs.19515	ESTs, Highly similar to NRG3_HUMAN PRO-N	4.2
	409719	AJ769160	Hs.108681	Homo sapiens brain tumor associated prot	4.2
	428538	AI143139	Hs.2288	visinin-like 1	4.2
15	429118	H20669	Hs.35406	ESTs, Highly similar to unnamed protein	4.2
	432865	AJ753709	Hs.152484	ESTs, Weakly similar to I38022 hypothetical	4.2
	447138	AI439112	Hs.93828	ESTs, Weakly similar to 2109260A B cell	4.2
	450648	AJ703366	Hs.26766	ESTs	4.2
	451459	AJ797515	Hs.270560	ESTs, Moderately similar to ALU7_HUMAN A	4.2
20	421688	AB011156	Hs.106794	KIAA0584 protein	4.2
	452778	AA194540	Hs.13522	ESTs, Weakly similar to I38022 hypothetical	4.2
	436421	AJ678031	Hs.122813	ESTs, Weakly similar to ZN22_HUMAN ZINC	4.2
	423858	AL137326	Hs.133483	Homo sapiens mRNA; cDNA DKFZp434B0650 (f	4.2
	434001	AW850905	Hs.3697	serine (or cysteine) proteinase inhibitor	4.2
25	437380	AL359577	Hs.112198	Homo sapiens mRNA; cDNA DKFZp547M073 (fr	4.2
	432328	AJ572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	4.1
	439607	BE540565	Hs.159460	ESTs	4.1
	424028	AF055084	Hs.153692	Homo sapiens cDNA FLJ14354 fis, clone Y7	4.1
	446936	H10207	Hs.47314	ESTs	4.1
30	424240	AB023185	Hs.143535	calcium/calmodulin-dependent protein kin	4.1
	412446	AJ768015	Hs.92127	ESTs	4.1
	409853	AA332277	Hs.57691	cadherin 18, type 2	4.1
	416220	N49776	Hs.170994	hypothetical protein MGC10946	4.1
	419583	AA248897	Hs.48784	ESTs	4.1
35	426071	AW138057	Hs.163835	ESTs	4.1
	428743	AL080060	Hs.301549	Homo sapiens mRNA; cDNA DKFZp564H172 (fr	4.1
	432809	AA565509	Hs.131703	ESTs	4.1
	440105	AA694010	Hs.6932	Homo sapiens clone 23809 mRNA sequence	4.1
	452039	AJ922968	Hs.172510	ESTs	4.1
40	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger	4.1
	457561	AA331517	Hs.286055	chimerin (chimaerin) 2	4.1
	429038	AL023513	Hs.194768	seizure related gene 6 (mouse)-like	4.1
	433932	AW954599	Hs.169330	neuronal protein	4.1
	436637	AJ783629	Hs.26766	ESTs	4.1
45	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	4.1
	450530	NM_006668	Hs.25121	cytochrome P450, subfamily 46 (cholester	4.1
	407721	Y12735	Hs.38018	dual-specificity tyrosine-(Y)-phosphoryl	4.1
	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfot	4.1
	410486	AW235094	Hs.69233	zinc finger protein	4.0
50	413916	N49813	Hs.75615	apolipoprotein C-II	4.0
	438703	AI803373	Hs.31599	ESTs	4.0
	424726	AK001007	Hs.138760	Homo sapiens cDNA FLJ10145 fis, clone HE	4.0
	405771				4.0
	418841	NM_002332	Hs.89137	low density lipoprotein-related protein	4.0
55	421784	AJ681535	Hs.148135	serine/threonine kinase 33	4.0
	424176	AL137273	Hs.142307	hypothetical protein	4.0
	425773	N21279	Hs.237749	ESTs	4.0
	427304	AA761526	Hs.163853	ESTs	4.0
	428882	AA436915	Hs.131748	ESTs, Moderately similar to ALU7_HUMAN A	4.0
60	452834	AJ838827	Hs.105685	KIAA1688 protein	4.0
	453745	AA952989	Hs.63908	hypothetical protein MGC14726	4.0
	405239	U89281	Hs.11958	oxidative 3 alpha hydroxysteroid dehydro	4.0
	413801	M62246	Hs.35406	ESTs, Highly similar to unnamed protein	4.0
	429698	AJ685088	Hs.26339	ESTs, Weakly similar to S21348 probable	4.0
65	435854	AJ278120	Hs.4996	putative ankyrin-repeat containing prote	4.0
	439199	R40373	Hs.26299	ESTs	4.0
	439450	R51613	Hs.125304	ESTs	4.0
	446782	AI653048	Hs.144006	ESTs	4.0
	419687	AJ638859	Hs.227699	ESTs, Weakly similar to T203_HUMAN TRANS	3.9
70	402408				3.9
	453362	H14988	Hs.107375	ESTs	3.9
	414219	W20010	Hs.75823	ALL1-fused gene from chromosome 1q	3.9
	420578	AA613546	Hs.99034	GTP-binding protein Rho7	3.9
	425010	T16837	Hs.4241	ESTs	3.9
75	444230	H95537	Hs.146067	ESTs	3.9
	441736	AW292779	Hs.169799	ESTs	3.9
	418951	F07809	Hs.89506	paired box gene 6 (aniridia, keratins)	3.9
	406311				3.9
	408460	AA054726	Hs.285574	ESTs	3.9
80	410658	AW105231	Hs.192035	ESTs	3.9
	414699	AJ815523	Hs.76930	synuclein, alpha (non A4 component of am	3.9
	418849	AW474547	Hs.53565	Homo sapiens PIG-M mRNA for mannosyltran	3.9
	429477	AI275514	Hs.6658	ESTs	3.9
	433768	AA609234	Hs.112669	ESTs	3.9

	436190	AK001059		gb:Homo sapiens cDNA FLJ10197 fis, clone	3.9
	447891	RA1754	Hs.6496	ESTs	3.9
	450221	AA328102	Hs.24641	cytoskeleton associated protein 2	3.9
5	404283				3.9
	453919	AW59912	Hs.7076	KIAA1705 protein	3.9
	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	3.9
	412754	AW160375	Hs.74565	amyloid beta (A4) precursor-like protein	3.9
	445314	AI689948	Hs.65489	Homo sapiens cDNA: FLJ21517 fis, clone C	3.9
10	435652	N32388	Hs.334370	uncharacterized hypothalamus protein HBE	3.9
	407378	AA299264	Hs.57776	ESTs, Moderately similar to I38022 hypot	3.9
	438054	AA776826	Hs.62183	ESTs	3.9
	436420	AA443956	Hs.31595	ESTs	3.9
	445133	AW157646	Hs.153506	ESTs	3.9
15	432590	AI609273	Hs.110783	ESTs	3.9
	463331	AI240665	Hs.8895	ESTs	3.9
	410227	AB009284	Hs.61152	exostoses (multiple)-like 2	3.8
	424635	AA420887	Hs.115455	Homo sapiens cDNA FLJ14259 fis, clone PL	3.8
	451489	NM_005503	Hs.26468	amyloid beta (A4) precursor protein-bind	3.8
20	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13080 fis, clone NT	3.8
	448302	AI480208	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,	3.8
	415669	NM_005025	Hs.78589	serine (or cysteine) proteinase inhibitor	3.8
	417355	D13168	Hs.62002	endothelin receptor type B	3.8
	446727	AB011095	Hs.16032	KIAA0523 protein	3.8
25	424340	AA339038	Hs.7033	ESTs	3.8
	423346	AI267677	Hs.127416	synaptotagmin 1	3.8
	412788	AA120960	Hs.198416	ESTs	3.8
	404593				3.8
	416856	N27833	Hs.269028	ESTs, Weakly similar to I38022 hypotheti	3.8
30	429886	AA460367	Hs.224223	ESTs, Moderately similar to I38022 hypot	3.8
	439619	AW975998	Hs.58595	ESTs, Weakly similar to I38022 hypotheti	3.8
	439634	W79377	Hs.167	microtubule-associated protein 2	3.8
	440322	AA879430		gb:cj91d08.s1 Soares_NFL_T_GBC_S1 Homo s	3.8
	447761	AF061573	Hs.19492	protocadherin 8	3.8
35	452453	AI902519		gb:QV-BT009-101198-051 BT009 Homo sapien	3.8
	439671	AW162840	Hs.6641	kinesin family member 5C	3.8
	447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	3.8
	459278	AW294659	Hs.34054	Homo sapiens cDNA: FLJ22488 fis, clone H	3.8
40	447028	AI973128	Hs.167257	brain link protein-1	3.8
	449458	AI805078	Hs.208261	ESTs	3.8
	445888	AF070564	Hs.13415	Homo sapiens clone 24571 mRNA sequence	3.8
	407385	AA610150	Hs.272072	ESTs, Weakly similar to I38022 hypotheti	3.8
	428841	AI418430	Hs.104935	ESTs	3.8
	430643	AW970065	Hs.287425	MEGF10 protein	3.8
45	422263	AA307839	Hs.129908	KIAA0591 protein	3.8
	451625	R56793	Hs.106576	alanine-glyoxylate aminotransferase 2-li	3.8
	439238	BE160852	Hs.247117	ESTs, Moderately similar to ALUF_HUMAN I	3.8
	441928	AI370188	Hs.211454	ESTs	3.8
	441797	AI936933	Hs.214635	ESTs	3.7
50	414922	D00723	Hs.77631	glycine cleavage system protein H (amino	3.7
	425588	F07398	Hs.46751	ESTs	3.7
	437007	AA741300	Hs.202599	ESTs, Weakly similar to I38022 hypotheti	3.7
	435793	AB037734	Hs.4993	KIAA1313 protein	3.7
	443682	AI383061	Hs.47248	ESTs, Highly similar to similar to Cdc14	3.7
55	425741	AF052152	Hs.159412	Homo sapiens clone 24628 mRNA sequence	3.7
	418211	BE244746	Hs.247474	hypothetical protein FLJ21032	3.7
	440080	AW051697	Hs.143707	ESTs	3.7
	452898	AA814497	Hs.78792	ESTs	3.7
	435575	AF213457	Hs.44234	triggering receptor expressed on myeloid	3.7
60	409234	AI879419	Hs.27206	ESTs	3.7
	420489	AA815089	Hs.193513	ESTs	3.7
	426890	AA393167	Hs.41294	ESTs	3.7
	438849	W28948	Hs.10762	ESTs	3.7
	441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	3.7
65	448796	AA147829	Hs.301431	endothelial zinc finger protein induced	3.7
	459318	NM_000038		gb:Homo sapiens adenomatosis polyposis c	3.7
	459518	AI937419	Hs.294069	Homo sapiens cDNA FLJ13384 fis, clone PL	3.7
	434444	AI765276	Hs.101257	hypothetical protein MGC3295	3.7
	421183	AL135740	Hs.102447	TSC-22-like	3.7
70	410655	U92849	Hs.64311	a disintegrin and metalloproteinase doma	3.7
	421637	AF035290	Hs.106300	Homo sapiens clone Z3556 mRNA sequence	3.7
	418522	AA605038	Hs.7149	Homo sapiens cDNA: FLJ21950 fis, clone H	3.7
	420807	AA280627	Hs.57846	ESTs	3.7
	449951	AW265634	Hs.133100	ESTs	3.7
75	422634	NM_016010	Hs.118821	CGI-62 protein	3.7
	421030	AW161357	Hs.101174	microtubule-associated protein tau	3.7
	427099	AB032953	Hs.173560	odd Oz/ten-m homolog 2 (Drosophila, mous	3.7
	452355	N54926	Hs.29202	G protein-coupled receptor 34	3.7
	440483	AI208836	Hs.150386	ESTs	3.7
80	429597	NM_003816	Hs.2442	a disintegrin and metalloproteinase doma	3.7
	423756	AA828125		gb:cd71a09.s1 NCI_CGAP_Ov2 Homo sapiens	3.6
	425187	AW014486	Hs.22509	ESTs	3.6
	434859	BE255080	Hs.299315	collapsin response mediator protein-5; C	3.6
	413199	M82843	Hs.75236	ELAV (embryonic lethal, abnormal vision,	3.6

	445729	H21066	Hs.13223	Homo sapiens mRNA full length insert cDN	3.6
	416120	H46739		gb:yo14h02.s1 Soares adult brain N2b5HB5	3.6
	429239	AA448419	Hs.45209	ESTs	3.6
	419086	NM_000216	Hs.89591	Kallmann syndrome 1 sequence	3.6
5	446659	AJ353561	Hs.226376	ESTs	3.6
	426757	AW205640	Hs.158206	ESTs	3.6
	418819	AA228776	Hs.191721	ESTs	3.6
	458332	AI000341	Hs.220491	ESTs	3.6
10	408826	AF216077	Hs.48376	Homo sapiens clone HB-2 mRNA sequence	3.6
	410343	AA084273	Hs.76561	ESTs, Weakly similar to S47072 finger pr	3.6
	410507	AA355288	Hs.40834	transferrin epithelia response protein	3.6
	422977	AA631498		gb:np83h04.s1 NCL CGAP_Thy1 Homo sapiens	3.6
	425305	AA363025	Hs.155572	Human clone 23801 mRNA sequence	3.6
15	428002	AA418703		gb:zv98c03.s1 Soares_NhHMPu_S1 Homo sapi	3.6
	428505	AL035461	Hs.2281	chromogranin B (secretogranin 1)	3.6
	430530	AA480870	Hs.47660	ESTs	3.6
	436425	AI913146	Hs.318725	CGI-72 protein	3.6
	438078	AI016377	Hs.131693	ESTs	3.6
20	442927	AI024347	Hs.131519	ESTs	3.6
	446242	N66336	Hs.7360	ESTs	3.6
	448831	AL080123	Hs.22182	zinc finger protein 23 (KOX 16)	3.8
	450474	AW872844	Hs.201919	ESTs	3.6
	452198	AI097560	Hs.61210	ESTs, Weakly similar to I38022 hypothet	3.6
25	455800	R22479	Hs.167073	Homo sapiens cDNA FLJ13047 fis, clone NT	3.6
	436443	AW138211	Hs.128746	ESTs	3.6
	426514	BE816833	Hs.170195	bone morphogenetic protein 7 (osteogenic	3.8
	456038	AA203285	Hs.294141	ESTs, Weakly similar to alternatively sp	3.6
	408902	AW014869	Hs.5510	ESTs	3.6
30	442950	AI500417	Hs.46764	ESTs	3.6
	423905	AW579960	Hs.135150	lung type-I cell membrane-associated gly	3.6
	425478	AB007953	Hs.268840	ESTs	3.6
	453884	AA365925	Hs.36232	KIAA0186 gene product	3.6
	404721				3.6
35	408453	AI369838	Hs.45127	chondroitin sulfate proteoglycan 5 (neur	3.6
	440553	AA889416	Hs.295362	Homo sapiens cDNA FLJ14459 fis, clone HE	3.5
	446372	AB020644	Hs.14945	long fatty acyl-CoA synthetase 2 gene	3.5
	413999	N46124	Hs.34460	ESTs	3.5
	421458	NM_003654	Hs.104576	carbohydrate (keratan sulfate Gal-6) sul	3.5
40	425017	AL119305	Hs.288405	ESTs	3.5
	435958	H98180	Hs.117975	ESTs	3.5
	415101	R45531	Hs.144534	ESTs	3.5
	451320	AW118072	Hs.89981	diacylglycerol kinase, zeta (104kD)	3.5
	430290	AI734110	Hs.136355	ESTs	3.5
45	416836	D54745	Hs.80247	cholecystokinin	3.5
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	3.5
	419412	AW161058	Hs.90297	synuclein, beta	3.5
	437860	AA333063	Hs.279898	Homo sapiens cDNA: FLJ23165 fis, clone L	3.5
	452689	F33868	Hs.284176	transferrin	3.5
50	416661	AA634543	Hs.79440	IGF-II mRNA-binding protein 3	3.5
	427491	R43279	Hs.22574	ESTs, Weakly similar to I38022 hypothet	3.5
	428037	N47474	Hs.89230	potassium intermediate/small conductance	3.5
	444584	AI168422		gb:ok30e11.x1 Soares_NSF_F8_9W_OT_PA_P_S	3.5
	408296	AL117452	Hs.44155	DKFZP586G1517 protein	3.5
55	453775	NM_002916	Hs.35120	replication factor C (activator 1) 4 [37	3.5
	412659	AW753865	Hs.74376	oligodendrocyte related ER localized protei	3.5
	429077	AB028983	Hs.2352	adenylate cyclase 2 (brain)	3.5
	436887	AW853157	Hs.193235	hypothetical protein DKFZp547D155	3.5
	450784	AW246803	Hs.47289	ESTs	3.5
60	446827	AW451243	Hs.157069	ESTs	3.5
	436434	N50465	Hs.92927	putative 47 kDa protein	3.5
	412777	AI335773	Hs.270123	ESTs	3.5
	436476	AA326108	Hs.33829	bHLH protein DEC2	3.5
	408601	U47928	Hs.86122	protein A	3.4
65	429401	AW296102	Hs.99272	ESTs, Weakly similar to S32567 A4 protei	3.4
	448425	AI500359	Hs.233401	ESTs	3.4
	418727	AA227609	Hs.94834	ESTs	3.4
	451729	AW160725	Hs.312469	ESTs	3.4
	435910	AI084152	Hs.21782	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.4
70	434577	R37316	Hs.179769	Homo sapiens cDNA: FLJ22487 fis, clone H	3.4
	414598	AI094221	Hs.135150	lung type-I cell membrane-associated gly	3.4
	436627	BE621702	Hs.29076	hypothetical protein FLJ21841	3.4
	413293	AL047483	Hs.302498	GTP-binding protein homologous to Saccha	3.4
	423992	AW888282	Hs.137208	Homo sapiens mRNA; cDNA DKFZp564H1663 (f	3.4
75	426249	F05422	Hs.166352	nucleoporin-like protein 1	3.4
	426968	U07616	Hs.173034	amphiphysin (Stiff-Mann syndrome with br	3.4
	430388	AA356923	Hs.240770	nuclear cap binding protein subunit 2, 2	3.4
	435061	AI651474	Hs.163944	ESTs	3.4
	452291	AF015592	Hs.28853	CDC7 (cell division cycle 7, S. cerevisi	3.4
80	449714	AB033015	Hs.23941	KIAA1189 protein	3.4
	443392	AI055821	Hs.293420	ESTs	3.4
	410082	AA081594	Hs.158311	Musashi (Drosophila) homolog 1	3.4
	445337	NM_013280	Hs.12523	fibronectin leucine rich transmembrane p	3.4
	408493	BE208654	Hs.46039	phosphoglycerate mutase 2 (muscle)	3.4

5	432731	R31178	Hs.287820	fibronectin 1	3.4
	448768	AB018311	Hs.21917	KIAA0768 protein	3.4
	432613	AW081698	Hs.80712	KIAA0202 protein	3.4
	434164	AW207019	Hs.148135	serine/threonine kinase 33	3.4
	425294	AF033827	Hs.155553	HNK-1 sulfotransferase	3.4
10	410108	AA081659	Hs.318775	OSBP-related protein 6	3.4
	406815	AA833930	Hs.286036	tRNA isopentenylpyrophosphate transferase	3.4
	402855				3.3
	422170	AF91949	Hs.112432	anti-Müllerian hormone	3.3
	445034	AW293376	Hs.143659	ESTs	3.3
15	424378	W28020	Hs.167988	neural cell adhesion molecule 1	3.3
	423611	AB011163	Hs.129908	KIAA0591 protein	3.3
	435583	R88872	Hs.4964	DKFZP586J1824 protein	3.3
	404819				3.3
	436607	AW661783	Hs.211061	ESTs	3.3
20	427315	AA179949	Hs.175563	Homo sapiens mRNA; cDNA DKFZp564N0763 (f	3.3
	452693	T79153	Hs.48589	zinc finger protein 228	3.3
	454998	AW850180		gb:IL3-CT0219-271099-022-C09 CT0219 Homo	3.3
	406927	M26460		gb:Homo sapiens (clone 104) retinoblasto	3.3
	409045	AA635062	Hs.50094	Homo sapiens mRNA; cDNA DKFZp434C0515 (f	3.3
25	415238	R37780	Hs.21422	ESTs	3.3
	417845	AL117461	Hs.62719	Homo sapiens mRNA; cDNA DKFZp586F1822 (f	3.3
	421192	AA833718	Hs.204529	KIAA1806 protein	3.3
	426695	AW118191	Hs.112729	ESTs	3.3
	438885	AI886558	Hs.184987	ESTs	3.3
30	451782	AF222980	Hs.26985	disrupted in schizophrenia 1	3.3
	452103	R42764	Hs.339654	ESTs, Weakly similar to t38022 hypothel	3.3
	453590	AF150278	Hs.33578	KIAA0820 protein	3.3
	453816	NM_003462	Hs.33846	dynein, axonemal, light intermediate pol	3.3
	457285	AI038858	Hs.130522	Kv channel-interacting protein 1	3.3
35	436045	AB037723	Hs.5028	DKFZP564O0423 protein	3.3
	437470	AL290147	Hs.134742	hypothetical protein DKFZp547D065	3.3
	448520	AB002387	Hs.21355	doublecortin and CaM kinase-like 1	3.3
	439480	AJ271643	Hs.87469	putative acid-sensing ion channel	3.3
	432656	NM_000248	Hs.3078	MHC class II transactivator	3.3
40	443898	AW804296	Hs.9950	Sec61 gamma	3.3
	423582	BE000831	Hs.23837	Homo sapiens cDNA FLJ11812 fis, clone HE	3.3
	445953	AI612775	Hs.145710	ESTs	3.3
	427940	AA417812	Hs.38775	ESTs	3.3
	414683	S78298	Hs.76888	hypothetical protein MGC12702	3.3
45	428484	AF104032	Hs.184801	solute carrier family 7 (cationic amino	3.3
	420649	AI866964	Hs.124704	ESTs, Moderately similar to S65657 alpha	3.3
	418498	AL036591	Hs.20887	hypothetical protein FLJ10392	3.3
	457579	AB030816	Hs.38761	HRAS-like suppressor	3.3
	436556	AI364997	Hs.7572	ESTs	3.2
50	424369	R87622	Hs.26714	KIAA1831 protein	3.2
	457065	AI476318	Hs.192480	ESTs	3.2
	440210	AW674562	Hs.125298	ESTs	3.2
	444513	AL120214	Hs.7117	glutamate receptor, ionotropic, AMPA 1	3.2
	434353	AA630853	Hs.131375	ESTs, Moderately similar to ALUB_HUMAN I	3.2
55	414430	AI346201	Hs.76118	ubiquitin carboxyl-terminal esterase L1	3.2
	439924	AI985897	Hs.125293	ESTs	3.2
	411505	AF155659	Hs.70565	molybdenum cofactor synthesis 2	3.2
	423175	W27595	Hs.18653	hypothetical protein FLJ14627	3.2
	415115	AA214228	Hs.127751	hypothetical protein	3.2
60	407878	D87468	Hs.40888	activity-regulated cytoskeleton-associat	3.2
	410274	AA381807	Hs.61762	hypoxia-inducible protein 2	3.2
	437762	T78028	Hs.154679	synaptotagmin I	3.2
	438944	AA302517	Hs.92732	KIAA1444 protein	3.2
	450313	AI038989	Hs.332633	Bardet-Biedl syndrome 2	3.2
65	409469	D86407	Hs.54481	low density lipoprotein receptor-related	3.2
	410953	AW811766	Hs.334858	hypothetical protein MGC12250	3.2
	418527	AA450388	Hs.7149	Homo sapiens cDNA: FLJ21950 fis, clone H	3.2
	420081	AW510776	Hs.84958	tubulin tyrosine ligase-like 1	3.2
	429498	AA453800	Hs.192793	ESTs	3.2
70	430099	AW194988	Hs.20537	hypothetical protein FLJ13942	3.2
	434928	AW015595	Hs.4267	Homo sapiens clones 24714 and 24715 mRNA	3.2
	435532	AW291488	Hs.117305	Homo sapiens, clone IMAGE:3882908, mRNA	3.2
	438306	AW188266	Hs.163845	ESTs	3.2
	439274	AFD86092	Hs.48372	ESTs	3.2
75	440847	AA907511	Hs.130178	ESTs	3.2
	447750	AI422234	Hs.143434	connexin 1	3.2
	455350	AW901809		gb:QV0-NN1020-170400-195-h02 NN1020 Homo	3.2
	430890	X54232	Hs.2699	glypican 1	3.2
	420568	F09247	Hs.247735	protocadherin alpha 10	3.2
80	410768	AF038185	Hs.66187	Homo sapiens clone 23700 mRNA sequence	3.2
	427450	AB014528	Hs.178121	KIAA0628 gene product	3.2
	430456	AA314998	Hs.241503	hypothetical protein	3.2
	430181	AF065314	Hs.234785	cyclic nucleotide gated channel alpha 3	3.2
	418512	AW498974	Hs.89981	diacylglycerol kinase, zeta (104kD)	3.2
	419912	AF249745	Hs.6066	Rho guanine nucleotide exchange factor (	3.2
	450689	AI369275	Hs.243010	Homo sapiens cDNA FLJ14445 fis, clone HE	3.2
	424899	AL119387	Hs.118062	ESTs	3.2

	436277	R88520	Hs.120917	ESTs	3.2
	451455	AI937227	Hs.8821	hepcidin antimicrobial peptide	3.2
	445078	AI869975	Hs.4775	junctional protein 3	3.2
5	447746	AW015920	Hs.161359	ESTs	3.2
	435458	F11872	Hs.4892	Homo sapiens clone 24841 mRNA sequence	3.2
	427729	AB033100	Hs.300646	KIAA protein (similar to mouse paladin)	3.2
	417417	F05745	Hs.89512	ATPase, Ca <sup>++</sup> transporting, plasma membra	3.1
	438810	AW897846	Hs.6421	hypothetical protein DKFZp761N09121	3.1
	439570	T79925	Hs.269165	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.1
10	432527	AW975028	Hs.102754	ESTs	3.1
	416801	X98834	Hs.79971	sal (Drosophila)-like 2	3.1
	421988	AW450481	Hs.161333	ESTs	3.1
	426509	M31166	Hs.2050	pentadactyl-related gene, rapidly induced b	3.1
15	408786	AA773187	Hs.294027	ESTs	3.1
	433494	AB029396	Hs.3353	beta-1,3-glucuronyltransferase 1 (glucur	3.1
	412723	AA648459	Hs.335951	hypothetical protein AF301222	3.1
	418329	AW247430	Hs.84152	cystathionine-beta-synthase	3.1
	439458	AI752409	Hs.109314	hypothetical protein FLJ20980	3.1
20	428832	AA578229	Hs.324239	ESTs, Moderately similar to ZN91_HUMAN Z	3.1
	452780	BE171598	Hs.13522	ESTs, Weakly similar to I38022 hypotheti	3.1
	438192	AI859065	Hs.337620	Homo sapiens AFG3L1 isoform 1 mRNA, part	3.1
	424939	AK000059	Hs.153881	Homo sapiens NY-REN-62 antigen mRNA, par	3.1
	403053	R58824	Hs.2186	eukaryotic translation elongation factor	3.1
25	404299				3.1
	407884	AF069291	Hs.40539	chromosome 8 open reading frame 1	3.1
	410181	AI468210	Hs.261285	pleiotropic regulator 1 (PRL1, Arabidops	3.1
	418852	BE537037	Hs.273294	hypothetical protein FLJ20069	3.1
	449101	AA205847	Hs.23016	G protein-coupled receptor	3.1
30	453240	AI969564	Hs.166254	hypothetical protein DKFZp5661133	3.1
	404866	BE243513	Hs.7212	hypothetical protein PP1044	3.1
	408096	BE250182	Hs.83765	dihydrofolate reductase	3.1
	439864	AI720078	Hs.291997	ESTs, Weakly similar to A47582 B-cell gr	3.1
35	414705	AW340125	Hs.76989	KIAA0097 gene product	3.1
	436315	BE390513	Hs.27935	hypothetical protein MGC4837	3.1
	426855	AL117427	Hs.172778	Homo sapiens mRNA; cDNA DKFZp566P013 (fr	3.1
	425683	AB037813	Hs.159200	hypothetical protein DKFZp762K222	3.1
	410126	BE169274	Hs.169387	KIAA0036 gene product	3.1
40	435312	AI243396	Hs.4865	voltage-gated sodium channel beta-3 subu	3.1
	425491	AA883316	Hs.255221	ESTs	3.1
	456273	AF154846	Hs.1148	zinc finger protein	3.1
	412140	AA219691	Hs.73625	RAB8 Interacting, kinesin-like (rabkines	3.1
	445255	NM_014841	Hs.12477	synapso-somal-associated protein, 91 kDa	3.1
45	432154	AI701523	Hs.112577	ESTs	3.1
	453128	AW026516	Hs.31791	acylphosphatase 2, muscle type	3.1
	438458	AW975186		gb:EST387294 MAGE resequences, MAGN Homo	3.1
	448616	AF035621	Hs.21611	kinesin family member 3C	3.0
	429281	AA830856	Hs.29808	Homo sapiens cDNA: FLJ21122 fs, clone C	3.0
	443906	AA348031	Hs.7913	ESTs	3.0
50	417318	AW553937	Hs.12891	ESTs	3.0
	452619	AW258597	Hs.61884	Homo sapiens, clone IMAGE:4298026, mRNA,	3.0
	444153	AK001610	Hs.10414	hypothetical protein FLJ10748	3.0
	408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	3.0
	426327	W03242	Hs.44898	Homo sapiens clone TCCCTA00151 mRNA sequ	3.0
55	451468	AW503398	Hs.293663	ESTs, Moderately similar to I38022 hypot	3.0
	422758	AF152329	Hs.284180	protocadherin gamma subfamily C, 3	3.0
	421633	AF121860	Hs.106260	sorting nexin 10	3.0
	428361	NM_015905	Hs.183858	transcriptional intermediary factor 1	3.0
	418932	L34059	Hs.89484	cadherin 4, type 1, R-cadherin (retinal)	3.0
60	416805	F13271	Hs.79981	Human clone Z3560 mRNA sequence	3.0
	419518	U79289	Hs.80798	Human clone Z3695 mRNA sequence	3.0
	422709	AA315331	Hs.153485	ESTs	3.0
	423135	N87655	Hs.26411	ESTs	3.0
	424901	Z11933	Hs.182505	POU domain, class 3, transcription facto	3.0
65	426617	W58006	Hs.266258	endonuclease G-like 1	3.0
	427386	AW838281	Hs.377717	ESTs	3.0
	429859	NM_007050	Hs.225952	protein tyrosine phosphatase, receptor t	3.0
	435071	D60683	Hs.35495	ESTs	3.0
	435092	AL137310	Hs.4749	Homo sapiens mRNA; cDNA DKFZp761E13121 (	3.0
70	436211	AK001581	Hs.334828	hypothetical protein FLJ10719; KIAA1794	3.0
	436936	AL134451	Hs.197478	ESTs	3.0
	445855	BE247129	Hs.145569	ESTs	3.0
	452294	AI871925	Hs.117895	ESTs, Moderately similar to A47582 B-cel	3.0
	433980	AA137152	Hs.286049	phosphoserine aminotransferase	3.0
75	430228	AW950939	Hs.6382	ESTs, Highly similar to T00391 hypotheti	3.0
	451026	AA013218	Hs.157492	cer-d4 (mouse) homolog	3.0
	435232	NM_001262	Hs.4854	cyclin-dependent kinase inhibitor 2C (p1	3.0
	439566	AF086387		gb:Homo sapiens full length insert cDNA	3.0
	425782	U66468	Hs.159525	cell growth regulatory with EF-hand doma	3.0
80	416888	D44643	Hs.14144	secreted modular calcium-binding protein	3.0
	416874	H98752	Hs.42568	ESTs	3.0
	410388	W28187	Hs.3327	Homo sapiens cDNA: FLJ22219 fs, clone H	3.0
	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	3.0
	424066	Z89348	Hs.112461	ESTs, Weakly similar to I38022 hypotheti	3.0

	404048				3.0
	429163	AA884766		gbam20a10.s1 Soares_NFL_T_GBC_S1 Homo s	3.0
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	3.0
	418196	AJ745649	Hs.26549	KIAA1708 protein	3.0
5	434131	AJ858275	Hs.143659	ESTs	3.0
	441255	R06350	Hs.171635	ESTs	2.9
	453900	AW003582	Hs.226414	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.9
	453905	NM_002314	Hs.35566	LM domain kinase 1	2.9
10	416602	NM_006159	Hs.79389	net (chicken)-like 2	2.9
	431173	AW971198	Hs.294068	ESTs	2.9
	425599	AW366745	Hs.214140	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.9
	436401	AI087858	Hs.29088	ESTs	2.9
	422960	AW890487	Hs.63984	cadherin 13, H-cadherin (heart)	2.9
15	451558	NM_001089	Hs.26630	ATP-binding cassette, sub-family A (ABC1	2.9
	412490	AW803564	Hs.288550	Homo sapiens cDNA: FLJ22528 fs, clone H	2.9
	433149	BE257872	Hs.42949	hypothetical protein HES6	2.9
	434811	AW971205	Hs.114280	ESTs	2.9
	425897	AA935315	Hs.48555	Homo sapiens cDNA: FLJ21693 fs, clone C	2.9
20	452092	BE245374	Hs.27842	hypothetical protein FLJ11210	2.9
	453496	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	2.9
	411124	AW196937	Hs.53929	ESTs, Weakly similar to ALUB_HUMAN III	2.9
	419227	BE537383	Hs.89739	cholinergic receptor, nicotinic, beta po	2.9
	427651	AW405731	Hs.18498	Homo sapiens cDNA FLJ12277 fs, clone MA	2.9
	411707	R42637	Hs.21963	hypothetical protein DKFZp761B0514	2.9
25	435741	AI240668	Hs.113099	ESTs	2.9
	437273	AL137451	Hs.120873	ESTs, Highly similar to T48266 hypotheti	2.9
	422939	AW394055	Hs.98427	ESTs, Weakly similar to I38022 hypotheti	2.9
	439376	AA883521	Hs.222064	ESTs	2.9
30	439935	S75105	Hs.301676	glutamate receptor, ionotropic, kainate	2.9
	437267	AW511443	Hs.258110	ESTs	2.9
	453740	AL120295	Hs.311809	ESTs, Moderately similar to PC4259 ferri	2.9
	400250				2.9
	400992				2.9
35	408814	N62499	Hs.176227	hypothetical protein FLJ11155	2.9
	411849	AW984970	Hs.18861	ESTs, Moderately similar to KIAA1276 pro	2.9
	414853	U31116	Hs.77501	sarcoglycan, beta (43kD dystrophin-assoc	2.9
	423751	AW235633	Hs.46525	ESTs	2.9
	426910	AA470023	Hs.180089	ESTs, Moderately similar to ALU1_HUMAN A	2.9
40	450203	AF097994	Hs.301528	L-kynurenine/alpha-aminoadipate amine tra	2.9
	459311	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	2.9
	425304	AA463844	Hs.31339	fibroblast growth factor 11	2.9
	428500	AI815395	Hs.184641	fatty acid desaturase 2	2.9
	421641	AI638184	Hs.106334	Homo sapiens clone 23836 mRNA sequence	2.9
45	421141	AW117261	Hs.125914	ESTs	2.9
	407870	AB032990	Hs.40719	hypothetical protein KIAA1164	2.9
	456723	Z43902	Hs.4748	adenylate cyclase activating polypeptide	2.9
	436456	AW292677	Hs.248122	G protein-coupled receptor 24	2.9
	421483	NM_003388	Hs.104717	hypothetical protein MGC11333	2.9
50	412190	R16180	Hs.274461	ESTs	2.9
	446131	NM_000929	Hs.290	phospholipase A2, group V	2.9
	441668	AI611973	Hs.127525	ESTs	2.9
	437387	AJ188874	Hs.28847	AD028 protein	2.9
55	423420	AI571364	Hs.128382	Homo sapiens mRNA; cDNA DKFZp7611224 (f	2.9
	427958	AA418000	Hs.98280	potassium intermediate/small conductance	2.9
	429084	AJ001443	Hs.195614	splicing factor 3b, subunit 3, 130kD	2.9
	447067	R42098	Hs.21964	ESTs	2.9
	430887	N66801	Hs.260287	KIAA1841 protein	2.9
	441824	AB007871	Hs.7977	KIAA0411 gene product	2.9
60	424126	AA335635	Hs.95917	ESTs	2.9
	408739	W01556	Hs.238797	ESTs, Moderately similar to I38022 hypot	2.9
	447422	BE618703	Hs.98258	orthopedia (Drosophila) homolog	2.9
	435615	Y15065	Hs.4975	potassium voltage-gated channel, KQT-like	2.9
	446997	AA383439	Hs.16758	Spir-1 protein	2.9
65	433573	AF234887	Hs.57652	cadherin, EGF LAG seven-pass G-type rece	2.9
	408447	AK002089	Hs.45080	Homo sapiens cDNA FLJ11227 fs, clone PL	2.9
	419586	AI088485	Hs.144759	ESTs, Weakly similar to I38022 hypotheti	2.8
	417022	NM_014737	Hs.80905	Ras association (RalGDS/AF-6) domain fam	2.8
	408432	AW195262		gb:xi67b05.x1 NCL_CGAP_CML1 Homo sapiens	2.8
70	420320	AB002361	Hs.96633	KIAA0363 protein	2.8
	425241	AA324624	Hs.155247	aldolase C, fructose-bisphosphate	2.8
	428670	AA431682	Hs.134832	ESTs	2.8
	424415	NM_001975	Hs.146580	enolase 2, (gamma, neuronal)	2.8
	409185	AW981601	Hs.252406	hypothetical protein FLJ12298 similar to	2.8
75	411555	AF113537	Hs.70669	HMP19 protein	2.8
	426847	S78723	Hs.298523	5-hydroxytryptamine (serotonin) receptor	2.8
	458809	AW972512	Hs.20985	sin3-associated polypeptide, 30kD	2.8
	420071	AB028985	Hs.94806	ATP-binding cassette, sub-family A (ABC1	2.8
	424572	M19650	Hs.150741	2',3'-cyclic nucleotide 3' phosphodiaste	2.8
80	444670	H58373	Hs.332938	hypothetical protein MGC5370	2.8
	411089	AA456454	Hs.183418	cell division cycle 2-like 1 (PITSLRE pr	2.8
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	2.8
	440637	AW900115	Hs.7309	Homo sapiens clone 23741 mRNA sequence	2.8
	408554	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	2.8

	403066	R58624	Hs.2186	eukaryotic translation elongation factor	2.8
	423449	AI497900	Hs.33067	ESTs	2.8
	424188	AW954552	Hs.142634	zinc finger protein	2.8
	429006	AA443143	Hs.50929	hypothetical protein FLJ13842	2.8
5	434981	AW182577	Hs.293077	ESTs	2.8
	437435	AA249439	Hs.27027	hypothetical protein DKFZp762H1311	2.8
	442748	AI016713	Hs.135787	ESTs	2.8
	443312	N52025	Hs.46616	ESTs	2.8
	450940	AI744943	Hs.143209	ESTs, Weakly similar to I38022 hypothet	2.8
10	452738	AL133800	Hs.7086	hypothetical protein MGC12435	2.8
	409182	AA064970	Hs.118145	ESTs	2.8
	439793	AA018825	Hs.7934	Kruppel-like factor 4 (gu)	2.8
	432683	AW995441	Hs.10475	ESTs	2.8
	434269	AK001991	Hs.3781	similar to murine leucine-rich repeat pr	2.8
15	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotoxicin)	2.8
	433290	R20077	Hs.302185	Homo sapiens clone Z3618 mRNA sequence	2.8
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	2.8
	435977	AL138079	Hs.5012	brain-specific membrane-anchored protein	2.8
	430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	2.8
20	425168	R93666		gb:Yq37d04.s1 Soares fetal liver spleen	2.8
	428180	AI129767	Hs.182674	guanine nucleotide binding protein (G pr	2.8
	409348	AI401535	Hs.146090	ESTs	2.8
	409887	AL137534	Hs.56876	Homo sapiens mRNA; cDNA DKFZp434H1419 (I	2.8
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	2.8
25	430039	BE253012	Hs.153400	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.8
	417642	BE302665	Hs.105481	hypothetical protein FLJ20357	2.8
	419169	AW851980	Hs.262346	ESTs, Weakly similar to S72482 hypothet	2.8
	434008	AA740878	Hs.112982	ESTs	2.8
	446776	AW293417	Hs.156455	ESTs	2.8
30	408838	AI669535	Hs.40369	ESTs	2.8
	422565	BE259035	Hs.118400	singed (Drosophila)-like (sea urchin fas	2.8
	447397	BE247676	Hs.18442	E-1 enzyme	2.8
	412530	AA768268	Hs.266273	hypothetical protein FLJ13346	2.8
	424330	AW073953	Hs.333396	Homo sapiens cDNA FLJ13596 fis, clone PL	2.8
35	446377	AW014022	Hs.170953	ESTs	2.8
	458924	BE242158	Hs.24427	DKFZP566O1646 protein	2.8
	447710	AI420523	Hs.328241	ESTs	2.8
	404049				2.8
40	416913	AW934714		gb:RC1-DT0001-031299-011-a11 DT0001 Homo	2.8
	426400	M78361	Hs.169743	Homo sapiens clone 25121 neuronal olfact	2.8
	413264	W28456	Hs.134757	hypothetical protein FLJ20033	2.7
	458997	AW937420	Hs.69662	ESTs	2.7
	422864	AA318323		gb:EST20390 Retina II Homo sapiens cDNA	2.7
45	430526	AF181862	Hs.242407	G protein-coupled receptor, family C, gr	2.7
	452023	AB032999	Hs.27568	KIAA1173 protein	2.7
	432022	AL162042	Hs.272348	Homo sapiens mRNA; cDNA DKFZp78L1212 (I	2.7
	452438	BE514230	Hs.29595	JM4 protein	2.7
	435408	H07897	Hs.4302	ESTs, Weakly similar to T29299 hypothet	2.7
	418791	AA935633	Hs.194628	ESTs	2.7
50	438821	AA826425	Hs.291829	ESTs	2.7
	423464	NM_016240	Hs.128856	CSR1 protein	2.7
	442091	AW770493	Hs.182874	guanine nucleotide binding protein (G pr	2.7
	442242	AV647908	Hs.90424	Homo sapiens cDNA: FLJ23285 fis, clone H	2.7
55	412436	AA665089		gb:nu78d01.s1 NCLCGAP_Alv1 Homo sapiens	2.7
	432821	BE170702	Hs.279005	solute carrier family 21 (organic anion	2.7
	416404	AA180138	Hs.107924	ESTs	2.7
	441364	AW450466	Hs.126830	ESTs, Weakly similar to YD38_YEAST HYPOT	2.7
	450202	AW969756	Hs.34145	ESTs, Weakly similar to B49647 GTP-bindi	2.7
60	426304	AA374532	Hs.124673	Homo sapiens cDNA FLJ11477 fis, clone HE	2.7
	426722	U76456	Hs.190787	tissue inhibitor of metalloproteinase 4	2.7
	449701	AW952323	Hs.129908	KIAA0591 protein	2.7
	420372	AW960049	Hs.293660	Homo sapiens, clone IMAGE:3535476, mRNA,	2.7
	410318	AA084050	Hs.269259	ESTs, Weakly similar to S23650 retrovitu	2.7
	414603	R58394	Hs.25119	ESTs, Weakly similar to YEX0_YEAST HYPOT	2.7
65	416096	H18577	Hs.88974	cytochrome b-245, beta polypeptide (chro	2.7
	420896	AW149342	Hs.24444	Homo sapiens cDNA: FLJ22165 fis, clone H	2.7
	424856	AA347746	Hs.9521	ESTs, Weakly similar to ZN43_HUMAN ZINC	2.7
	436304	AA339622	Hs.108887	ESTs	2.7
	441027	AI911412	Hs.126444	ESTs	2.7
70	452545	N31940	Hs.14434	ESTs, Weakly similar to I38022 hypothet	2.7
	454201	AB023191	Hs.44131	KIAA0974 protein	2.7
	448560	BE613183	Hs.23213	ESTs	2.7
	426807	AA385315	Hs.156682	ESTs	2.7
	425825	AI929508	Hs.159590	lymphocyte antigen 6 complex, locus H	2.7
75	440351	AF030933	Hs.7179	RAD1 (S. pombe) homolog	2.7
	425390	AI092634	Hs.166114	protein tyrosine phosphatase, non-recept	2.7
	427624	AA406245	Hs.24895	ESTs	2.7
	426413	AA377823		gb:EST90805 Synovial sarcoma Homo sapien	2.7
80	422491	AA338548	Hs.117548	neuronal	2.7
	424560	AA158727	Hs.150555	protein predicted by clone 23733	2.7
	432415	T16971	Hs.289014	ESTs, Weakly similar to A43932 mucin 2 p	2.7
	414685	AA157155	Hs.274414	hypothetical protein FLJ14457	2.7
	415827	H17462	Hs.23079	ESTs	2.7



	445568	H00918	Hs.268744	KIAA1796 protein	2.7
	433315	R96764	Hs.239706	GRB2-associated binding protein 1	2.7
	428862	NM_000346	Hs.2316	SRX (sex determining region Y)-box 9 (ca	2.7
	447959	AI452784	Hs.270270	ESTs, Weakly similar to 2109260A B cell	2.7
5	428420	BE383808	Hs.322430	NDRG family, member 4	2.7
	436899	AA764852	Hs.291567	ESTs	2.7
	444100	AA383343	Hs.22116	CDC14 (cell division cycle 14, S. cerevi	2.7
	426501	AW043782	Hs.293616	ESTs	2.7
	449092	U91641	Hs.22985	alpha2,8-sialyltransferase	2.7
10	427311	AB020672	Hs.175411	KIAA0865 protein	2.7
	453313	BE005771	Hs.153746	hypothetical protein FLJ22490	2.7
	404029				2.7
	416289	W26333	Hs.337438	ESTs	2.6
	439108	AW163034	Hs.6467	synaptogyrin 3	2.6
15	418746	AI955289	Hs.300769	ribosomal protein L36	2.6
	412046	Y07847	Hs.73088	RAS-related on chromosome 22	2.6
	435040	AI932350	Hs.152825	ESTs	2.6
	453083	U87223	Hs.31622	contactin associated protein 1	2.6
20	428167	AA770021	Hs.16332	ESTs	2.6
	420028	AB014680	Hs.8786	carbohydrate (N-acetylglucosamine-6-O) s	2.6
	443715	AI583187	Hs.9700	cyclin E1	2.6
	421247	BE391727	Hs.102910	general transcription factor IIF, polype	2.6
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	2.6
25	415058	AB004662	Hs.77867	adenosine A1 receptor	2.6
	451697	AW449774	Hs.295380	POM (POM121 rat homolog) and ZP3 fusion	2.6
	433701	AW445023	Hs.15155	ESTs	2.6
	457358	AI479755	Hs.129010	ESTs	2.6
	430347	NM_002039	Hs.239706	GRB2-associated binding protein 1	2.6
30	418027	AB037807	Hs.83293	hypothetical protein	2.6
	440491	R35252	Hs.24944	ESTs, Weakly similar to 2109260A B cell	2.6
	425171	AW732240	Hs.16365	ESTs	2.6
	459335	AW298545	Hs.250726	EST	2.6
	425402	AI216881	Hs.24970	ESTs, Weakly similar to B34323 GTP-bind	2.6
35	453169	AB037815	Hs.32156	KIAA1394 protein	2.6
	433647	AA603367	Hs.222294	ESTs	2.6
	450414	AI907735	Hs.21446	KIAA1716 protein	2.6
	446233	AI282028	Hs.25205	ESTs	2.6
	415446	F08898	Hs.66076	ESTs	2.6
40	445873	AA250970	Hs.251946	poly(A)-binding protein, cytoplasmic 14	2.6
	413012	D83777	Hs.75137	KIAA0193 gene product	2.6
	428671	BE297851	Hs.189482	zinc finger protein 179	2.6
	427158	AA936603	Hs.166231	ESTs	2.6
	408988	AL119844	Hs.49476	Homo sapiens clone TUA8 Cri-du-chat regi	2.6
45	459516	AI049662	Hs.246858	EST	2.6
	402693				2.6
	408039	AA131424	Hs.50340	ESTs	2.6
	422896	AW961489	Hs.154116	ESTs	2.6
	423130	AW897686	Hs.21213	ESTs	2.6
50	438796	W87821	Hs.109590	genethonin 1	2.6
	439871	R86518	Hs.46736	hypothetical protein FLJ23476	2.6
	440192	AA872282	Hs.190596	ESTs	2.6
	419708	AK000753	Hs.92374	hypothetical protein	2.6
	449436	AA860329	Hs.279307	hypothetical protein DKFZp434i2117	2.6
55	436870	AW204219	Hs.155560	calnexin	2.6
	448424	AW008892	Hs.31924	ESTs	2.6
	401324				2.6
	414136	AA812434	Hs.119023	SMC2 (structural maintenance of chromoso	2.6
	433943	AA992805	Hs.44865	lymphoid enhancer-binding factor 1	2.6
60	428001	H87428	Hs.219907	ESTs, Moderately similar to Transforming	2.6
	429139	F09092	Hs.66087	ESTs	2.6
	423073	BE252922	Hs.123119	MAD (mothers against decapentaplegic, Dr	2.6
	448966	AW372914	Hs.86149	phosphoinositol 3-phosphate-binding prot	2.6
	444001	AI095087	Hs.152299	ESTs, Moderately similar to S65657 alpha	2.6
65	412049	N53437	Hs.18268	adenylate kinase 5	2.6
	441783	BE313412	Hs.7961	Homo sapiens clone 25012 mRNA sequence	2.6
	425287	R88249	Hs.155524	peanut (Drosophila)-like 2	2.6
	432149	AW614326	Hs.157022	ESTs, Weakly similar to T34549 probable	2.6
	452234	AW084176	Hs.223296	ESTs, Weakly similar to T38022 hypotheti	2.6
70	453478	AF083898	Hs.33021	neuro-oncological ventral antigen 2	2.6
	418982	AA714835	Hs.271883	ESTs	2.6
	418858	AW961605	Hs.21145	hypothetical protein RG083M05.2	2.6
	443257	AI334040	Hs.11614	HSPC065 protein	2.6
	428748	AW593206	Hs.98785	Ksp37 protein	2.6
75	444984	H15474	Hs.132898	fatty acid desaturase 1	2.6
	433404	T32982	Hs.102720	ESTs	2.6
	434779	AF153815	Hs.50151	potassium inwardly-rectifying channel, s	2.6
	420582	BE047878	Hs.99093	Homo sapiens chromosome 19, cosmid R2837	2.6
	452856	AF034799	Hs.30881	protein tyrosine phosphatase, receptor t	2.6
80	436440	AI471862	Hs.196008	Homo sapiens cDNA FLJ11723 lis, clone HE	2.6
	438527	AI969251	Hs.115325	RAB7, member RAS oncogene family-like 1	2.6
	433216	AF217412	Hs.47320	neuroligin 3	2.6
	435380	AA679001	Hs.192221	ESTs	2.6
	428966	AF059214	Hs.194687	cholesterol 25-hydroxylase	2.6

5	439653	AW021103	Hs.6631	hypothetical protein FLJ20373	2.6
	419304	AJ271325	Hs.146101	ESTs, Weakly similar to T45070 protein k	2.6
	422991	H10940	Hs.48965	Homo sapiens cDNA: FLJ21693 fis, clone C	2.6
	448548	R13209	Hs.21413	solute carrier family 12, (potassium-chl	2.6
	435370	AJ964074	Hs.225838	ESTs	2.6
	408875	NM_015434	Hs.48604	DKFZP434B168 protein	2.5
	457005	AJ007421	Hs.172597	sal (Drosophila)-like 3	2.5
	430154	AW583058	Hs.234726	serine (or cysteine) proteinase inhibitor	2.5
10	438549	BE386801	Hs.21858	trinucleotide repeat containing 3	2.5
	427951	AI826125	Hs.43546	ESTs	2.5
	411800	N39342	Hs.103042	microtubule-associated protein 18	2.5
	457683	AI821877	Hs.140002	ESTs, Moderately similar to ALU7_HUMAN A	2.5
	451422	AB002336	Hs.26395	erythrocyte membrane protein band 4.1-d	2.5
	430713	AA351647	Hs.2642	eukaryotic translation elongation factor	2.5
15	428826	AL048842	Hs.194019	atractin	2.5
	428963	AW382682	Hs.258208	Homo sapiens, clone MGC:15606, mRNA, com	2.5
	428141	D50402	Hs.182611	solute carrier family 11 (proton-coupled	2.5
	429550	AW293055	Hs.119357	ESTs	2.5
	438662	AA223599	Hs.6351	cleavage and polyadenylation specific fa	2.5
20	435760	AF231922	Hs.213004	chromosome 21 open reading frame 62	2.5
	427513	AI478318	Hs.192480	ESTs	2.5
	430061	AB037817	Hs.230188	KIAA1396 protein	2.5
	435923	BE301930	Hs.5010	Homo sapiens clone 24672 mRNA sequence	2.5
	417123	BE326521	Hs.159450	ESTs	2.5
25	439699	AF086534	Hs.187561	ESTs, Moderately similar to ALU1_HUMAN A	2.5
	412980	AI816750	Hs.20977	hypothetical protein MGC3129 similar to	2.5
	427209	H06508	Hs.92423	KIAA1566 protein	2.5
	424327	AA431707	Hs.31209	ESTs	2.5
	436340	R42248	Hs.21605	ESTs	2.5
30	450650	T65617	Hs.101257	hypothetical protein MGC3295	2.5
	439444	AI277652	Hs.54578	ESTs, Weakly similar to I38022 hypotheti	2.5
	400777				2.5
	439478	AF049460	Hs.6574	deformed epidermal autoregulatory factor	2.5
35	450407	NM_000810	Hs.24969	gamma-aminobutyric acid (GABA) A recepto	2.5
	450385	AI631024	Hs.24948	synuclein, alpha interacting protein (sy	2.5
	432558	R97268	Hs.177269	ESTs	2.5
	400860				2.5
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	2.5
40	416063	BE047699	Hs.93454	ESTs	2.5
	414998	NM_002543	Hs.77729	oxidized low density lipoprotein (lectin	2.5
	452823	AB012124	Hs.30696	transcription factor-like 5 (basic helix	2.5
	417791	AW965339	Hs.111471	ESTs	2.5
	418079	RA0058	Hs.6911	ESTs	2.5
	408495	W68796	Hs.237731	ESTs	2.5
45	442104	L20971	Hs.188	phosphodiesterase 4B, cAMP-specific (dun	2.5
	437370	AL359587	Hs.161962	Homo sapiens mRNA; cDNA DKFZp547D023 (tr	2.5
	428803	W81489	Hs.223025	RAB31, member RAS oncogene family	2.5
	424959	NM_005781	Hs.153937	activated p21cdc42Hs kinase	2.5
	427413	BE547647	Hs.177781	hypothetical protein MGC5618	2.5
50	408955	BE315170	Hs.8087	NAG-5 protein	2.5
	415261	T40928	Hs.8346	ESTs	2.5
	415716	N59294	Hs.179662	nucleosome assembly protein 1-like 1	2.5
	417873	BE266659	Hs.293659	Homo sapiens, Similar to RIKEN cDNA A430	2.5
	418388	R72332	Hs.29258	Homo sapiens cDNA FLJ11364 fis, clone HE	2.5
55	421002	AF116030	Hs.100932	transcription factor 17	2.5
	423244	AL039379	Hs.209602	ESTs, Weakly similar to ubiquitous TPR m	2.5
	423553	AA405635	Hs.98854	ESTs, Weakly similar to DYLL_HUMAN CYTOP	2.5
	427961	AW293165	Hs.143134	ESTs	2.5
60	428301	AW628668	Hs.98440	ESTs, Weakly similar to I38022 hypotheti	2.5
	428508	BE252383	Hs.184668	SBB131 protein	2.5
	428858	AA436760		gbzv67d11.1 Soares_fetal_fetus_Nb2HF8_	2.5
	428943	AW086180	Hs.37636	ESTs, Weakly similar to KIAA1392 protein	2.5
	432427	AL037630	Hs.6638	Homo sapiens cDNA FLJ11602 fis, clone HE	2.5
	435347	AW014873	Hs.116963	ESTs	2.5
65	437949	U78519	Hs.41654	ESTs, Weakly similar to A46010 X-linked	2.5
	438208	AL041224	Hs.65379	ESTs	2.5
	440286	U29589	Hs.7138	cholinergic receptor, muscarinic 3	2.5
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALUF_HUMAN IIII	2.5
	441805	AA285136	Hs.301914	neuronal specific transcription factor D	2.5
70	442337	AI371029	Hs.129257	ESTs, Weakly similar to TC17_HUMAN TRANS	2.5
	442789	AW904361	Hs.131191	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.5
	445556	AI910241	Hs.12887	actin-related protein 3-beta	2.5
	449086	AI828357	Hs.208037	ESTs	2.5
75	459583	AI907673		gb:IL-BT152-080399-004 BT152 Homo sapien	2.5

TABLE 88:

Pkey: Unique Eos probe/identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

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Pkey	CAT Number	Accession
408432	1058667_1	AW195262 R27858 AW811262
412225	1284108_1	AW902042 N77591

412436	129439_1	AA655089 AA135130 AA484059 AA102419 AW877765
416120	1571266_1	H46739 H51513 H19779
416871	1626761_1	H98716 N90792 N24283
416913	163001_1	AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499
422864	222336_1	AA318323 H11145 R15289 AA451945 AA476690 AA436954 Z43802 F11753 T65491 D81821
422949	223184_1	AA319435 N56456 AA319377 AW961532 T48452 AA894424
422977	223410_1	AA631458 A1017191 AA491211 AA761823 AA714555 AA768099 AA808286 A1934069 AA570223 AA574389 AA582438 A1745346 AW964510 AA319842
		AW853758 H56414
423756	231725_1	AA828125 AA834883 AA330555
425168	247552_1	R98368 AL133929 AA351636 H78818 AA477084 Z28957 H80194
425517	252729_1	AF121179 BE162736 AA358827
426413	266650_1	AA377823 AW954494 A1022688
428002	285602_1	AA418703 AA418711 BE071915 BE071920 BE071912
428679	294049_1	AA431765 AA432015
428858	296453_1	AA436760 AW237453 BE327496 N47347 N56967
429007	298301_1	D80842 AA443145 AL119015 AW904500
429163	300543_1	AA884766 AW974271 AA592975 AA447312
433532	368950_1	AW975367 AA598607 AA742735
436190	41555_1	AK001058 AA633055
437034	431713_1	AA742843 AA808575 AW976668
438458	457837_1	AW975186 AA807807 D29548
438993	467651_1	AA828995 AA834879 A1926361
439566	47387_1	AF086387 W77884 W77711
440322	491956_1	AA879430 BE070262 BE070493 BE070272 BE070484 BE070397 BE070395 BE070201 BE070198 BE070404 BE070270 BE070400
444584	611496_1	A1169422 D80113 T59074
447197	711623_1	R36075 A1366546 R36167
448451	764068_1	AWD15994 R39898 AWD00978 A1598202 A1521706
450625	84032_1	AW970107 AA513951 AA010406
452453	918300_1	A1902519 A1902518 A1902516
454996	1248640_1	AW850180 AW850326
455350	1283853_1	AW901809 AW901787 AW901795 AW901792 AW901744 AW901753 AW901807 AW901798

TABLE 8C:

Key:	Unique number corresponding to an Eos probeset
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NL_position:	Indicates nucleotide positions of predicted exons.

40	Pkey	Ref	Strand	NL_position
	400777	8131663	Plus	70745-71121
	400780	8131663	Minus	118372-118619
	400859	9757499	Minus	91888-92018,99131-98294,99474-99570
	400860	9757499	Minus	151830-152104,152649-152744
45	400992	8096828	Plus	140390-140822
	401324	9863791	Plus	234057-234174
	402408	9786239	Minus	110328-110491
	402604	9909420	Plus	20393-20767
	402605	9909420	Minus	47680-47973
50	402693	8569863	Minus	82366-82515
	402855	9662953	Minus	59763-59909
	404029	7671252	Plus	108716-111112
	404048	3688074	Minus	54421-56808
	404049	3688074	Minus	75765-78155
55	404283	2276311	Minus	99460-99564
	404299	5738652	Minus	3826-4025
	404541	8318559	Plus	103456-103664
	404584	9857511	Plus	138651-139153
	404593	8944086	Minus	74922-75768
60	404721	9856648	Minus	173763-174294
	404819	4878240	Plus	16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578
	405238	7249119	Minus	51728-61838
	405771	7018349	Plus	91191-91254,91510-91589
	405819	4007657	Plus	2830-2967
65	406311	9211559	Minus	137114-139033

TABLE 9A: ABOUT 1202 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CENTRAL NERVOUS SYSTEM (CNS)

Table 9A lists about 1202 genes up-regulated in glioblastoma compared to normal adult central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult CNS tissues was greater than or equal to 2.0. The "average" glioblastoma level was set to the 75th percentile amongst various glioblastoma tumors. The "average" normal adult CNS tissue level was set to the 95th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey:	Unique Eos probeset identifier number
ExAccn:	Exemplar Accession number, Genbank accession number
UnigenelD:	Unigene number
Unigene Title:	Unigene gene title
R1:	Ratio of 75th percentile tumor to 95th percentile normal adult nervous system tissue

80	Pkey	ExAccn	UnigenelD	Unigene Title	R1
	452461	N78223	Hs.108106	transcription factor	20.1
	436895	AF037335	Hs.6338	carbonic anhydrase XII	15.2
	453941	U39817	Hs.36820	Bloom syndrome	14.2

	443247	BE614387	Hs.333893	c-Myc target JPO1	12.4
	428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin)	12.0
	447342	AI199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	11.7
	422163	AF027208	Hs.112360	prominin (mouse)-like 1	11.4
5	439451	AF086270	Hs.278554	heterochromatin-like protein 1	11.2
	424800	AL035588	Hs.153203	MyoD family inhibitor	10.2
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	10.0
	444190	AI878918	Hs.10526	cysteine and glycine-rich protein 2	9.9
	412140	AA219691	Hs.73625	RAB8 interacting, kinesin-like (rabkines	9.9
10	493340	AW235786	Hs.195359	hypothetical protein MGC10954	9.8
	409731	AA125985	Hs.56145	thymosin, beta, identified in neuroblast	9.4
	439978	BE139460	Hs.124673	Homo sapiens cDNA FLJ11477 fs, clone HE	8.9
	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	8.9
	455516	BE172704	Hs.222746	KIAA1610 protein	8.2
15	420092	AA814043	Hs.88045	ESTs	7.9
	422631	BE218919	Hs.118793	hypothetical protein FLJ10688	7.9
	453392	U23752	Hs.32864	SRY (sex determining region Y)-box 11	7.9
	438527	AI969251	Hs.115325	RAB7, member RAS oncogene family-like 1	7.9
20	427581	NM_014788	Hs.179703	KIAA0129 gene product	7.8
	418661	NM_001949	Hs.1189	E2F transcription factor 3	7.8
	440684	AI253123	Hs.127356	ESTs, Highly similar to S21424 nestin [H	7.8
	429643	AA455889	Hs.167279	PYVE-finger-containing Rab5 effector pro	7.7
	409638	AW450420	Hs.21335	ESTs	7.5
	444655	BE613126	Hs.47783	B aggressive lymphoma gene	7.5
25	456759	BE269150	Hs.127792	delta (Drosophila)-like 3	7.5
	412777	AI335773	Hs.270123	ESTs	7.4
	436807	AW661783	Hs.211081	ESTs	7.3
	432058	AW665996	Hs.130729	ESTs, Weakly similar to ALU1_HUMAN ALU S	7.3
30	417061	AI675944	Hs.186691	Homo sapiens cDNA FLJ12033 fs, clone HE	7.3
	428976	AL037824	Hs.184695	ras homolog gene family, member I	7.2
	433244	AB040943	Hs.271285	KIAA1510 protein	7.1
	436726	AA324975	Hs.128993	ESTs, Weakly similar to T00079 hypothe	7.1
	408432	AW195262		gb:cn57b05.x1 NCL_CGAP_CML1 Homo sapiens	7.1
35	434164	AW207019	Hs.148135	serine/threonine kinase 33	7.0
	445873	AA250970	Hs.251948	poly(A)-binding protein, cytoplasmic 1-4	7.0
	439726	AW449893	Hs.293707	ESTs, Weakly similar to I38598 zinc fing	7.0
	432656	NM_000246	Hs.3076	MHC class II transactivator	6.8
	431117	AF003522	Hs.250500	delta (Drosophila)-like 1	6.8
	453387	AI980741	Hs.252809	ESTs	6.8
40	418821	AA436002	Hs.183161	ESTs	6.6
	437034	AA742643		gb:ny91c01.s1 NCL_CGAP_GCB1 Homo sapiens	6.6
	411252	AB018549	Hs.69328	MD-2 protein	6.5
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	6.4
	452953	AI932884	Hs.271741	ESTs, Weakly similar to A48010 X-linked	6.3
45	433532	AW976367		gb:EST387475 MAGE resequences, MAGN Homo	6.3
	420311	AW445044	Hs.38207	Human DNA sequence from clone RP4-53015	6.3
	418097	RA5137	Hs.21868	ESTs	6.2
	407304	AA565832		gb:nj32b03.s1 NCL_CGAP_AA1 Homo sapiens	6.2
50	435256	AF193766	Hs.13872	cytokine-like protein C17	6.1
	449448	D60730	Hs.57471	ESTs	6.1
	403790				6.0
	425517	AF121179		gb:AF121179 Homo sapiens liver (Chang L-	6.0
	420674	NM_000055	Hs.1327	butyrylcholinesterase	6.0
55	435642	AA687376	Hs.269533	ESTs	5.9
	418216	AA682240	Hs.283099	AF15q14 protein	5.8
	439088	AF085947		gb:Homo sapiens full length insert cDNA	5.7
	408037	AW271720	Hs.42233	hypothetical protein FLJ10300	5.7
	412225	AW902042		gb:QV0-NN1022-170400-193-c02 NN1022 Homo	5.7
60	436109	AA822153	Hs.132760	hypothetical protein MGC15729	5.7
	435005	U80743	Hs.306094	trinucleotide repeat containing 12	5.7
	429149	AW193360	Hs.197962	ESTs, Weakly similar to I38022 hypothe	5.7
	418113	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	5.6
	405558				5.6
65	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	5.6
	442547	AA306997	Hs.217484	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.5
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	5.5
	420560	AW207748	Hs.59115	ESTs	5.5
	408096	BE250182	Hs.83765	dihydrofolate reductase	5.4
70	443539	AI076182	Hs.134074	ESTs, Moderately similar to ALU8_HUMAN A	5.4
	426318	AA375125	Hs.147112	Homo sapiens cDNA: FLJ22322 fs, clone H	5.3
	429115	AA446728	Hs.289020	Homo sapiens cDNA: FLJ14098 fs, clone MA	5.3
	453900	AW003582	Hs.226414	ESTs, Weakly similar to ALU8_HUMAN ALU S	5.3
	444168	AW378879		gb:RC1-HT0256-081199-011-01 HT0256 Homo	5.3
75	432789	D26381	Hs.3104	KIAA0042 gene product	5.3
	437036	AI571514	Hs.133022	ESTs	5.2
	421247	BE391727	Hs.102910	general transcription factor IIIH, polype	5.2
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALUF_HUMAN III	5.2
	451106	BE382701	Hs.25960	v-myc avian myelocytomatosis viral relat	5.1
	457211	AW972565	Hs.32399	ESTs, Weakly similar to G51797 vasodilat	5.1
80	454157	AW162806	Hs.312481	ESTs, Weakly similar to S66668 hydrogen	5.1
	423343	AA324843	Hs.246106	ESTs	5.1
	425292	NM_005824	Hs.155545	37 kDa leucine-rich repeat (LRR) protein	5.1
	406679	AA070786		gb:zm68b07.r1 Stratagene neuroepithelium	5.1

	442671	AI005668	Hs.134779	EST	5.1
	433001	AF217513	Hs.279905	clone HQ0310 PROQ310p1	5.0
	418819	AA228776	Hs.191721	ESTs	5.0
	432946	U60899	Hs.279854	mannosidase, alpha, class 2B, member 1	4.9
5	420730	NM_002691	Hs.99890	polymerase (DNA directed), delta 1, cata	4.9
	441217	AI922183	Hs.213246	ESTs	4.9
	453385	AW296101	Hs.252806	ESTs	4.8
	418203	X54942	Hs.83758	CDG28 protein kinase 2	4.7
	450813	AI739825	Hs.203376	ESTs	4.7
10	444008	BE395085	Hs.10086	type I transmembrane protein Fn14	4.7
	412530	AA766268	Hs.266273	hypothetical protein FLJ13346	4.7
	431070	AW408184	Hs.249184	transcription factor 19 (SC1)	4.7
	429788	AL080232	Hs.220696	Homo sapiens mRNA: cDNA DKFZp586A061 (fr	4.7
	405771				4.6
15	457065	AI476318	Hs.192480	ESTs	4.6
	436190	AK001059		gb:Homo sapiens cDNA FLJ10197 fs, clone	4.6
	400859				4.6
	435267	N23797	Hs.110114	ESTs	4.6
	443454	AI057494	Hs.133421	ESTs	4.5
20	452811	AA837079	Hs.118983	hypothetical protein FLJ12150	4.5
	437267	AW511443	Hs.258110	ESTs	4.5
	435020	AW505076	Hs.301855	DiGeorge syndrome critical region gene 8	4.5
	454269	AI961060	Hs.129908	KIAA0591 protein	4.5
	422106	D84239	Hs.111732	Fc fragment of IgG binding protein	4.5
25	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	4.5
	456534	X91195	Hs.100623	phospholipase C, beta 3, neighbor pseudo	4.5
	423758	AA828125		gb:cd71a09.s1 NCL_CGAP_Ov2 Homo sapiens	4.5
	417308	H80720	Hs.81892	KIAA0101 gene product	4.5
	422170	AI791949	Hs.112432	anti-Mullerian hormone	4.4
30	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytactin)	4.4
	406568	AF088886	Hs.11590	cathepsin F	4.4
	426812	AF105365	Hs.172613	solute carrier family 12 (potassium/chlo	4.4
	402516				4.4
	432865	AI753709	Hs.152484	ESTs, Weakly similar to t38022 hypotheti	4.4
35	413825	AW451103	Hs.71371	ESTs	4.4
	436068	R20597	Hs.9739	glycerol-3-phosphate dehydrogenase 1 (so	4.4
	418333	W92113		gb:zh48a01.r1 Soares fetal_liver_spleen_	4.4
	416933	BE581850	Hs.80508	small nuclear ribonucleoprotein polypept	4.4
40	438192	AI859065	Hs.337620	Homo sapiens AFG3L1 isoform 1 mRNA, part	4.3
	457374	AA433662		gb:nh05d12.s1 NCL_CGAP_Thy1 Homo sapiens	4.3
	433159	AB035898	Hs.150587	kinesin-like protein 2	4.3
	444386	BE065183		gb:RC1-BT0314-020200-012-c04 BT0314 Homo	4.3
	453202	AW085781	Hs.26270	hypothetical protein FLJ11588	4.3
	441020	W79283	Hs.35962	ESTs	4.3
45	414733	BE514535	Hs.77171	minichromosome maintenance deficient (S.	4.3
	407902	AL117474	Hs.41181	Homo sapiens mRNA: cDNA DKFZp727C191 (fr	4.3
	405701				4.3
	451659	BE379761	Hs.14248	ESTs	4.3
	418845	AA852985	Hs.89232	chromobox homolog 5 (Drosophila HP1 alph	4.2
50	433323	AA805132	Hs.30701	ESTs	4.2
	439811	AA135332	Hs.71608	ESTs	4.2
	415406	T26510		gb:AB282F8R Infant brain, LLNL array of	4.2
	436282	R91913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	4.1
55	441269	AW015206	Hs.178784	ESTs	4.1
	418727	AA227609	Hs.94834	ESTs	4.1
	433006	BE242758	Hs.190223	ESTs, Moderately similar to T29285 hypot	4.1
	436480	AJ271643	Hs.87469	putative acid-sensing ion channel	4.1
	430786	AA486144	Hs.31293	ESTs	4.1
	445372	N36417	Hs.144928	ESTs	4.1
60	410555	U92649	Hs.84311	a disintegrin and metalloproteinase doma	4.0
	457465	AW301344	Hs.122808	DNA replication factor	4.0
	422094	AF129535	Hs.272027	F-box only protein 5	4.0
	442029	AW956698	Hs.14458	neural precursor cell expressed, develop	4.0
	459321	AW044477	Hs.299538	ESTs	4.0
65	421308	AA687322	Hs.192843	leucine zipper protein FKSG14	4.0
	420567	AK000812	Hs.98874	similar to proline-rich protein 48	4.0
	447004	AW296968	Hs.157539	ESTs	4.0
	448295	AI381911	Hs.334859	KIAA1814 protein	3.9
	439699	AF086534	Hs.187561	ESTs, Moderately similar to ALU1_HUMAN A	3.9
70	440704	M69241	Hs.162	insulin-like growth factor binding prote	3.9
	453096	AW294831	Hs.11325	ESTs	3.9
	457026	AA397620	Hs.48692	ESTs	3.9
	404642				3.9
	450375	AA009847	Hs.8850	a disintegrin and metalloproteinase doma	3.9
75	430132	AA204686	Hs.234149	hypothetical protein FLJ20647	3.9
	437718	AI927288	Hs.196779	ESTs	3.9
	438490	AW593272	Hs.301299	ESTs	3.9
	429919	AA460692	Hs.278945	hypothetical protein FLJ23024	3.9
80	413604	R51767		gb:yg73g11.r1 Soares Infant brain 1N1B H	3.9
	425599	AW366745	Hs.214140	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.9
	448796	AA147829	Hs.301431	endothelial zinc finger protein induced	3.9
	449300	AI658959	Hs.222165	ESTs	3.8
	452203	X57522	Hs.158164	transporter 1, ATP-binding cassette, sub	3.8

	425769	U72513	Hs.159486	Human RPL13-2 pseudogene mRNA, complete	3.8
	404295				3.8
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	3.8
	428728	NM_016625	Hs.191381	hypothetical protein	3.8
5	409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromoso	3.8
	430172	AA468591	Hs.161889	ESTs	3.8
	447499	AW262580	Hs.147674	protocadherin beta 18	3.8
	405884				3.7
	437236	AW137817	Hs.244353	ESTs	3.7
10	418883	BE387036	Hs.1211	acid phosphatase 5, tartrate resistant	3.7
	444143	AW747998	Hs.160999	ESTs, Moderately similar to A56194 throm	3.7
	425529	NM_014656	Hs.158282	KIAA0040 gene product	3.7
	425502	R98895	Hs.125823	ESTs	3.7
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	3.7
15	402424				3.7
	429469	M84590	Hs.27	glycine dehydrogenase (decarboxylating;	3.7
	434072	H70854	Hs.283059	Homo sapiens PRO1082 mRNA, complete cds	3.7
	414872	U82010	Hs.77513	COX10 (yeast) homolog, cytochrome c oxid	3.7
20	426071	AW138057	Hs.163835	ESTs	3.7
	419078	M93119	Hs.89584	insulinoma-associated 1	3.7
	428037	N47474	Hs.89230	potassium intermediate/small conductance	3.7
	416547	H62914	Hs.288946	ESTs, Weakly similar to PC4259 ferritin	3.6
	436899	AA764852	Hs.281587	ESTs	3.6
25	436722	AW975977		gb:EST388086 MAGE resequences, MAGN Homo	3.6
	440652	A1216751	Hs.143977	ESTs	3.6
	428450	NM_014791	Hs.184339	KIAA0175 gene product	3.6
	452103	R42764	Hs.339654	ESTs, Weakly similar to I38022 hypotheti	3.6
	409048	H59990	Hs.37699	ESTs	3.6
30	439546	AF088068		gb:Homo sapiens full length insert cDNA	3.6
	443544	AJ076315	Hs.16359	ESTs	3.6
	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (ma	3.6
	435889	AJ249107	Hs.269901	ESTs	3.6
	420301	AA767526	Hs.22030	paired box gene 5 (B-cell lineage specif	3.6
35	438078	AJ016377	Hs.131693	ESTs	3.6
	408420	NM_005915	Hs.44766	retinitis pigmentosa 2 (X-linked recessi	3.5
	416871	H98716		gb:yx13d08.s1 Soares melanocyte 2NbHM Ho	3.5
	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	3.5
	448291	BE397753	Hs.14823	interferon, gamma-inducible protein 30	3.5
40	432281	AK001239	Hs.274263	hypothetical protein FLJ10377	3.5
	436123	AA057484	Hs.35408	ESTs, Highly similar to unnamed protein	3.5
	411256	AW834039		gb:QV0-TT0010-091199-053-e09 TT0010 Homo	3.5
	419239	AA468183	Hs.184598	Homo sapiens cDNA: FLJ23241 fs, clone C	3.5
	435065	BE064391		gb:RC4-BT0310-110300-015-b08 BT0310 Homo	3.5
45	435532	AW291488	Hs.117305	Homo sapiens, clone IMAGE:3682908, mRNA	3.5
	447101	N72185	Hs.44189	ESTs	3.5
	410530	M25809	Hs.64173	ATPase, H <sup>+</sup> -transporting, lysosomal (vacu	3.5
	422156	N34524		gb:yy56d10.s1 Soares_multiple_sclerosis_	3.5
50	453616	NM_003462	Hs.33846	dynein, axonemal, light intermediate pol	3.5
	439743	AL389956	Hs.283858	Homo sapiens mRNA full length insert cDN	3.5
	453684	AA355925	Hs.36232	KIAA0186 gene product	3.5
	424954	NM_000546	Hs.1846	tumor protein p53 (Li-Fraumeni syndrome)	3.5
	420721	AA927802	Hs.159471	ZAP3 protein	3.4
	426764	AA732524	Hs.151484	ESTs, Weakly similar to ALUC_HUMAN IIII	3.4
55	420649	A1866984	Hs.124704	ESTs, Moderately similar to S65657 alpha	3.4
	448831	AL080123	Hs.22182	zinc finger protein 23 (KOX 16)	3.4
	444371	BE540274	Hs.239	forkhead box M1	3.4
	402604				3.4
	442407	AW469584	Hs.32353	mitogen-activated protein kinase kinase	3.4
60	414300	AJ304870	Hs.188680	ESTs	3.4
	444670	H58373	Hs.332938	hypothetical protein MGC5370	3.4
	414550	BE379808		gb:601159567T1 NIH_MGC_53 Homo sapiens c	3.4
	452211	AJ885513	Hs.233420	ESTs	3.4
	414416	AW409985	Hs.76084	hypothetical protein MGC2721	3.4
65	449961	AW265834	Hs.133100	ESTs	3.4
	413257	BE075035		gb:PM3-BT0584-260300-002-g05 BT0584 Homo	3.4
	453857	AL080235	Hs.35881	DKFZP586E1621 protein	3.4
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	3.4
	422846	BE513934	Hs.1583	neutrophil cytosolic factor 1 (47kD, chr	3.4
70	446189	H85224	Hs.214013	ESTs	3.4
	437385	AA757055	Hs.164050	ESTs	3.4
	453652	AW009640	Hs.28368	ESTs, Moderately similar to S65657 alpha	3.4
	408298	A1745325	Hs.271923	Homo sapiens cDNA: FLJ22785 fs, clone K	3.3
	455778	BE089746		gb:CM2-BT0693-210300-123-d09 BT0693 Homo	3.3
75	417548	H65569	Hs.18845	ESTs	3.3
	412471	M63193	Hs.73946	endothelial cell growth factor 1 (platelet	3.3
	454631	AW811324		gb:IL3-ST0141-131099-017-A02 ST0141 Homo	3.3
	454294	AB000734	Hs.50640	JAK binding protein	3.3
	457131	AC002310	Hs.301463	Human Chromosome 18 BAC clone CIT887SK-A	3.3
80	410102	AW248508	Hs.279727	Homo sapiens cDNA FLJ14035 fs, clone HE	3.3
	449676	AW380579	Hs.209857	ESTs	3.3
	436211	AK001581	Hs.334828	hypothetical protein FLJ10719; KIAA1794	3.3
	453746	AL120611		gb:DKFZp761H119_r1 761 (synonym: hamy2)	3.3
	452789	AJ948829	Hs.213785	ESTs	3.3

	435380	AA679001	Hs.192221	ESTs	3.3
	426745	J03626	Hs.2057	uridine monophosphate synthetase (crotal	3.3
	453362	H14988	Hs.107375	ESTs	3.3
	456473	AI202788	Hs.25682	Homo sapiens mRNA for KIAA1863 protein,	3.3
5	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fis, clone PL	3.3
	445777	AI580371	Hs.145384	ESTs	3.3
	423757	AL049337	Hs.132571	Homo sapiens mRNA; cDNA DKFZp564P016 (fr	3.3
	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fis, clone CO	3.3
	404299				3.3
10	404108				3.3
	425189	H16622		gb:ym26c07.r1 Soares infant brain 1N8 H	3.3
	449318	AW236021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	3.3
	450193	AI916071	Hs.15607	Homo sapiens Fanconi anemia complementat	3.2
	427725	U56839	Hs.180533	mitogen-activated protein kinase kinase	3.2
15	424051	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (f	3.2
	418968	NM_000078	Hs.89538	cholesteryl ester transfer protein, plas	3.2
	449248	M33782	Hs.23391	Homo sapiens, Similar to transcription f	3.2
	439416	W58294	Hs.56254	ESTs	3.2
20	401698	AA172108	Hs.110950	Rag C protein	3.2
	408380	AF123050	Hs.44532	ubiquitin	3.2
	450325	AI835962	Hs.26289	ESTs	3.2
	428730	AA625947	Hs.25750	ESTs	3.2
	457538	AA305233	Hs.278712	eukaryotic translation initiation factor	3.2
	426836	NA1720	Hs.172684	vesicle-associated membrane protein 8 (e	3.2
25	442710	AI015631	Hs.23210	ESTs	3.2
	435232	NM_001262	Hs.4854	cyclin-dependent kinase inhibitor 2C (p1	3.2
	430970	AI018210	Hs.144083	ESTs	3.2
	416192	NM_005036	Hs.998	peroxisome proliferative activated recep	3.2
30	446676	H09380	Hs.300965	ESTs	3.2
	451459	AI797515	Hs.270560	ESTs, Moderately similar to ALU7_HUMAN A	3.2
	407603	AW955705	Hs.62604	Homo sapiens, clone IMAGE:429322, mRNA,	3.2
	413840	AI301558	Hs.146381	RNA binding motif protein, X chromosome	3.2
	448751	BE551203	Hs.201792	ESTs	3.2
	432593	AW301003	Hs.51483	ESTs, Weakly similar to hypothetical pro	3.2
35	458788	AI457098	Hs.280848	ESTs	3.2
	455909	BE156417	Hs.278798	ESTs	3.2
	419311	AA689591		gb:mv66a12.s1 NCL_CGAP_GCB1 Homo sapiens	3.2
	439710	AF086543		gb:Homo sapiens full length insert cDNA	3.1
40	434559	AF147315		gb:Homo sapiens full length insert cDNA	3.1
	455800	R22479	Hs.167073	Homo sapiens cDNA FLJ13047 fis, clone NT	3.1
	436703	AW880614	Hs.146381	RNA binding motif protein, X chromosome	3.1
	414799	AI752416	Hs.77326	insulin-like growth factor binding prote	3.1
	437860	AA333063	Hs.279898	Homo sapiens cDNA: FLJ23165 fis, clone L	3.1
	434182	W20309	Hs.118520	G-protein gamma-12 subunit	3.1
45	417900	BE250127	Hs.82906	CDC20 (cell division cycle 20, S. cerevi	3.1
	434769	AA648884	Hs.134278	Homo sapiens cDNA FLJ12676 fis, clone NT	3.1
	414825	X06370	Hs.77432	epidermal growth factor receptor (avian	3.1
	426413	AA377823		gb:EST90805 Synovial sarcoma Homo sapien	3.1
50	447959	AI452784	Hs.270270	ESTs, Weakly similar to 2109280A B cell	3.1
	404589				3.1
	421764	AI681535	Hs.148135	serine/threonine kinase 33	3.1
	419986	AI345455	Hs.78915	GA-binding protein transcription factor,	3.1
	416941	BE000150	Hs.48778	niban protein	3.1
	414761	AU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	3.1
55	449511	AI970394	Hs.197075	ESTs	3.1
	434746	AA648368	Hs.285368	ESTs	3.1
	434274	AA828539	Hs.116252	ESTs, Moderately similar to ALU1_HUMAN A	3.1
	427899	AA829286	Hs.332053	serum amyloid A1	3.1
	417642	BE302665	Hs.105461	hypothetical protein FLJ20357	3.1
60	452472	AW857300	Hs.294142	ESTs, Weakly similar to C55663 oligodend	3.1
	446131	NM_000929	Hs.290	phospholipase A2, group V	3.1
	440052	AI833744	Hs.195848	ESTs, Weakly similar to I38022 hypothei	3.1
	426531	AA381071		gb:EST94100 Activated T-cells XII Homo s	3.1
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	3.1
65	408267				3.1
	447039	AV661798	Hs.282915	ESTs	3.1
	404802				3.1
	406927	M26450		gb:Homo sapiens (clone 104) retinoblasto	3.0
70	419314	AW971924	Hs.87280	ESTs	3.0
	435894	AI076667	Hs.188011	ESTs	3.0
	432140	AK000404	Hs.272688	hypothetical protein FLJ20397	3.0
	443428	AF098158	Hs.9329	chromosome 20 open reading frame 1	3.0
	425202	AW962282	Hs.152049	ESTs, Weakly similar to I38022 hypothei	3.0
	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	3.0
75	418241	M26682	Hs.1149	UIM domain only 1 (rhombotin 1)	3.0
	446599	Z97832	Hs.15476	differentially expressed in FDCP (mouse	3.0
	412950	BE018531	Hs.245342	hypothetical protein FLJ14642	3.0
	428670	AA431682	Hs.134832	ESTs	3.0
	446975	BE246448	Hs.16695	ubiquitin-activating enzyme E1-like	3.0
80	437756	AA767537	Hs.197098	ESTs	3.0
	416084	L16991	Hs.79006	deoxythymidylate kinase (thymidylate kin	3.0
	402374	AL135225	Hs.301865	dopachrome tautomerase (dopachrome delta	3.0
	443885	H91806	Hs.15284	ESTs	3.0

	434008	AA740878	Hs.112982	ESTs	3.0
	452568	AA805634	Hs.300870	Homo sapiens mRNA; cDNA DKFZp547M072 (fr	3.0
	414239	AJ288330	Hs.182330	ESTs	3.0
	421013	M62397	Hs.1345	mutated in colorectal cancers	3.0
5	424635	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fis, clone PL	3.0
	410276	AI554545	Hs.68301	ESTs	3.0
	433855	N29862	Hs.44104	ESTs	3.0
	406028				3.0
	401626				3.0
10	415949	H10562	Hs.21691	ESTs	3.0
	418583	AA604379	Hs.65211	hypothetical protein	3.0
	417933	X02308	Hs.62962	thymidylate synthetase	3.0
	434577	R37316	Hs.179769	Homo sapiens cDNA; FLJ22487 fis, clone H	3.0
	430437	AJ768801	Hs.169943	Homo sapiens cDNA FLJ13569 fis, clone PL	2.9
15	427940	AA417812	Hs.38775	ESTs	2.9
	456060	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fis, clone MA	2.9
	421988	AW450481	Hs.161333	ESTs	2.9
	448775	AB025237	Hs.388	nudix (nucleoside diphosphate linked moi	2.9
	438598	AI805943	Hs.326067	hypothetical protein MGC5178	2.9
20	429612	AF062649	Hs.252587	pituitary tumor-transforming 1	2.9
	451189	AA016019	Hs.40905	ESTs	2.9
	401558				2.9
	426207	BE390657	Hs.30026	HSPC182 protein	2.9
	404721				2.9
25	401384				2.9
	417288	AI984792	Hs.108812	hypothetical protein FLJ22004	2.9
	427648	AI376722	Hs.180062	proteasome (prosome, macropain) subunit,	2.9
	435928	H64345	Hs.183961	ESTs	2.9
30	431740	N75450	Hs.183412	ESTs, Moderately similar to AF116721 67	2.9
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	2.9
	439972	AJ348100	Hs.124662	ESTs	2.9
	433112	AA973801	Hs.144553	ESTs, Weakly similar to unnamed protein	2.9
	423751	AW235633	Hs.46525	ESTs	2.9
35	406748	AW339106	Hs.217493	annexin A2	2.9
	422154	T78045	Hs.126927	ESTs	2.9
	405588				2.9
	440911	AA909536	Hs.143562	ESTs	2.9
	412420	AL035668	Hs.73853	bone morphogenetic protein 2	2.9
40	445043	AW014413	Hs.196066	ESTs	2.9
	410114	AW590540	Hs.271280	ESTs	2.9
	419217	AA504571		gb:aa60e12.r1 NCL_CGAP_GC81 Homo sapiens	2.9
	415849	R20529	Hs.6806	ESTs	2.9
	448140	AF146781	Hs.20450	BCM-like membrane protein precursor	2.9
45	453331	AI240665	Hs.8896	ESTs	2.9
	432085	AA401039	Hs.2903	protein phosphatase 4 (formerly X), cata	2.9
	438380	T08430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	2.9
	454377	AA076811		gb:7B03C12 Chromosome 7 Fetal Brain cDNA	2.9
	421491	H99999	Hs.42736	ESTs	2.8
50	452291	AF015592	Hs.28853	CDC7 (cell division cycle 7, S. cerevisi	2.8
	415446	F08898	Hs.66075	ESTs	2.8
	439518	W76326		gb:zd60d04.r1 Soares_fetal_haer_NbHH19W	2.8
	427221	L15409	Hs.174007	von Hippel-Lindau syndrome	2.8
	422493	AW474183	Hs.250173	hypothetical protein FLJ13158	2.8
55	419451	AI907117	Hs.90535	synaptobinding protein 2	2.8
	448789	BE539108	Hs.22051	hypothetical protein MGC15548	2.8
	424126	AA335635	Hs.96917	ESTs	2.8
	458895	AV660159	Hs.282284	ESTs, Weakly similar to I38022 hypotheti	2.8
	418973	AA233058	Hs.181518	ESTs	2.8
60	440471	AA886146	Hs.307944	ESTs	2.8
	421016	AA504583	Hs.101047	transcription factor 3 (E2A immunoglobul	2.8
	433647	AA603357	Hs.222294	ESTs	2.8
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	2.8
	421723	AA620400	Hs.300717	sodium channel, voltage-gated, type III,	2.8
65	434964	AI638850	Hs.130746	ESTs	2.8
	432022	AL162042	Hs.272348	Homo sapiens mRNA; cDNA DKFZp761L1212 (f	2.8
	400517	AF242388	Hs.149585	lensin	2.8
	433023	AW864793	Hs.87409	thrombospondin 1	2.8
	448734	BE614070	Hs.326416	Homo sapiens mRNA; cDNA DKFZp564H1916 (f	2.8
70	406736	AI254733	Hs.182426	ribosomal protein S2	2.8
	409207	AW373564	Hs.194637	BANP homolog, SMAR1 homolog	2.8
	440196	N72847	Hs.125221	ESTs	2.8
	403961				2.8
	425193	AW965689	Hs.22509	ESTs	2.8
75	425268	AI807883	Hs.180059	Homo sapiens cDNA FLJ20553 fis, clone KA	2.8
	440483	AJ200836	Hs.150386	ESTs	2.8
	412391	AW947710		gb:RC0-MT0004-130300-011-e07 MT0004 Homo	2.8
	448769	N66037	Hs.38173	ESTs	2.8
	411632	AW854829		gb:QV2-CT0261-201099-011-01 CT0261 Homo	2.8
80	438221	AI798853	Hs.122224	ESTs, Weakly similar to ALU5_HUMAN ALU S	2.8
	457578	AA578027		gb:n120d01.s1 NCL_CGAP_HSC1 Homo sapiens	2.8
	455510	AA422029	Hs.143640	ESTs, Weakly similar to hyperpolarizatio	2.8
	447769	AW873704	Hs.320831	Homo sapiens cDNA FLJ14597 fis, clone NT	2.8
	427701	AA411101	Hs.243888	nuclear autoantigenic sperm protein (his	2.8



	433800	AI034361	Hs.135150	lung type-I cell membrane-associated gly	2.8
	439662	H97552	Hs.269060	ESTs	2.8
	425694	U51333	Hs.159237	hexokinase 3 (white cell)	2.8
	414747	U30872	Hs.77204	centromere protein F (350/400kD, mitosis)	2.8
5	414598	AI094221	Hs.135150	lung type-I cell membrane-associated gly	2.8
	447752	M73700	Hs.105938	lactotransferrin	2.8
	408761	AA057264	Hs.238936	ESTs, Weakly similar to (define not ava	2.7
	453350	AI917771	Hs.61790	hypothetical protein FLJ23338	2.7
	456629	AW891965	Hs.279789	histone deacetylase 3	2.7
10	439538	AA837323	Hs.164047	ESTs	2.7
	458814	AI498957	Hs.170861	ESTs, Weakly similar to Z195_HUMAN ZINC	2.7
	456029	BE255990	Hs.218329	hypothetical protein	2.7
	451129	BE072881		gb:RC2-BT0548-200300-012-e09 BT0548 Homo	2.7
	458412	AW749617	Hs.280776	lankyrase, TRF1-interacting ankyrin-rela	2.7
15	453536	AA137000	Hs.62578	ESTs	2.7
	438378	AW970529	Hs.86434	hypothetical protein FLJ21816	2.7
	425745	U44060	Hs.14427	Homo sapiens cDNA: FLJ21800 fis, clone H	2.7
	446322	N23033	Hs.155814	ESTs	2.7
	451592	AI805416	Hs.213897	ESTs	2.7
20	429466	M85835	Hs.12827	ESTs	2.7
	429747	M87507	Hs.2490	casepase 1, apoptosis-related cysteine pr	2.7
	455514	AW983871		gb:RC1-HN0003-220300-021-h07 HN0003 Homo	2.7
	414732	AW410976	Hs.77152	minichromosome maintenance deficient (S.	2.7
	444207	AI565004	Hs.79572	cathepsin D (lysosomal aspartyl protease	2.7
25	427421	AA042414	Hs.3059	coatomer protein complex, subunit beta	2.7
	449655	AI021887	Hs.59970	ESTs	2.7
	422648	D86983	Hs.118893	Melanoma associated gene	2.7
	428494	AA233439	Hs.184634	hypothetical protein FLJ20005	2.7
	408895	X60648	Hs.172550	polypyrimidine tract binding protein (he	2.7
30	453255	AA278167	Hs.19215	Homo sapiens, clone IMAGE:3605822, mRNA	2.7
	427348	NM_014137	Hs.177258	PRO0650 protein	2.7
	435370	AI964074	Hs.225838	ESTs	2.7
	407862	BE548267	Hs.50724	Homo sapiens cDNA FLJ10934 fis, clone OV	2.7
	411874	AA086106	Hs.20403	ESTs	2.7
35	421192	AA833718	Hs.204529	KIAA1806 protein	2.7
	435899	W89093	Hs.189914	ESTs	2.7
	414603	R58394	Hs.25119	ESTs, Weakly similar to YEX0_YEAST HYPOT	2.7
	453482	AL037291	Hs.236605	ESTs, Moderately similar to ALU4_HUMAN A	2.7
	436554	AI985810	Hs.301173	ESTs	2.7
40	427628	AI077143	Hs.179565	minichromosome maintenance deficient (S.	2.7
	403881				2.7
	431779	AW971178	Hs.268571	apolipoprotein C-I	2.7
	404984				2.7
45	448275	BE514434	Hs.20830	kinasin-like 2	2.7
	446839	BE091826	Hs.16244	mitotic spindle coiled-coil related prot	2.7
	411927	BE274009	Hs.772	glycogen synthase 1 (muscle)	2.7
	404756				2.7
	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	2.7
	422176	H80977		gb:yu89a11.s1 Soares fetal liver spleen	2.7
50	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	2.7
	436532	AA721522		gb:nv54h12.r1 NCI_CGAP_Ew1 Homo sapiens	2.7
	412833	AW960547	Hs.298262	ribosomal protein S19	2.7
	457245	AI745498	Hs.204579	ESTs	2.7
	446861	AI696519	Hs.14427	Homo sapiens cDNA: FLJ21800 fis, clone H	2.7
55	453263	R91778	Hs.99369	ESTs	2.7
	459385	BE380047		gb:601159362F2 NIH_MGC_53 Homo sapiens c	2.7
	438764	AA824524	Hs.336452	ESTs	2.7
	429285	AI971081	Hs.20432	ESTs, Weakly similar to I38022 hypoteli	2.7
	424853	BE549737	Hs.132967	Human EST clone 122897 mariner transpos	2.7
60	430037	BE409649	Hs.227789	mitogen-activated protein kinase-activat	2.7
	449892	N73608	Hs.50308	ESTs	2.7
	454201	AB023191	Hs.44131	KIAA0974 protein	2.7
	452279	AA286844	Hs.61260	hypothetical protein FLJ13164	2.7
	427954	J03060	Hs.247551	metadn 1	2.7
65	400371	U80740			2.7
	452449	AW068858	Hs.20943	ESTs	2.7
	431114	AA492400	Hs.291015	ESTs	2.7
	417088	M54915	Hs.81170	p1m-1 oncogene	2.7
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	2.7
70	403680				2.7
	454679	AW813110		gb:CMA-ST0189-051099-021-005 ST0189 Homo	2.6
	411968	AI207410	Hs.69280	Homo sapiens, clone IMAGE:3636299, mRNA,	2.6
	422240	R60594	Hs.29002	KIAA1706 protein	2.6
	424368	AB037766	Hs.145085	KIAA1345 protein	2.6
75	405808				2.6
	419700	AF084935	Hs.92357	galactokinase 1	2.6
	435972	W95088	Hs.114198	ESTs	2.6
	453558	S70782	Hs.557	adrenergic, alpha-1D-, receptor	2.6
	443725	AW245680	Hs.9701	growth arrest and DNA-damage-inducible,	2.6
80	444156	AV500059	Hs.86437	ESTs, Highly similar to AF219140 1 gastr	2.6
	428209	AA424197	Hs.98947	ESTs, Weakly similar to S33496 trypsin [	2.6
	437640	AA764893	Hs.272155	ESTs, Weakly similar to I38022 hypoteli	2.6
	453948	AI970797	Hs.64859	ESTs	2.6

	415402	AA164687	Hs.177576	mannosyl (alpha-1,3)-glycoprotein beta-	2.6
	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kd)	2.6
	418228	AA962181	Hs.111219	ESTs, Moderately similar to ALU1_HUMAN A	2.6
	401324				2.6
5	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypothei	2.6
	443210	AI692649	Hs.9451	hypothetical protein MGC13168	2.6
	457244	AA581385	Hs.162473	ESTs, Weakly similar to I38022 hypothei	2.6
	417144	AA382104	Hs.81337	lectin, galactoside-binding, soluble, 9	2.6
10	433933	AI754389	Hs.133494	Homo sapiens clone TCCCA00164 mRNA sequ	2.6
	437437	AA226869	Hs.16520	hypothetical protein DKFZp762L0311	2.6
	434206	AW136973	Hs.288516	ESTs, Weakly similar to S89890 mitogen I	2.6
	400992				2.6
	455530	AW984744		gb:RC1-HN0015-040400-011-d03 HN0015 Homo	2.6
15	436139	AA765788	Hs.120936	ESTs	2.6
	448330	AL036449	Hs.207163	ESTs	2.6
	412942	AL120344	Hs.75074	mitogen-activated protein kinase-activat	2.6
	432753	NM_014075	Hs.336938	Homo sapiens PRO0593 mRNA, complete cds	2.6
	433430	AI863735	Hs.186755	ESTs	2.6
20	436693	AW973223	Hs.303197	B-cell CLL/lymphoma 7C	2.6
	429482	AF076974	Hs.203952	transformation/transcription domain-esso	2.6
	432715	AA247152	Hs.200483	ESTs, Weakly similar to KIAA1074 protein	2.6
	414217	AI309298	Hs.278988	Homo sapiens cDNA: FLJ23165 fs, clone L	2.6
	434165	AA971328	Hs.95361	myosin VIIA (Usher syndrome 1B (autosoma	2.6
25	414835	AA158720	Hs.185342	ESTs	2.6
	424489	T48851	Hs.149250	D-siglec precursor,	2.6
	436486	AA281959	Hs.5210	glia maturation factor, gamma	2.6
	403797				2.6
	434573	AW372340	Hs.159717	ESTs	2.6
30	418841	NM_002332	Hs.89137	low density lipoprotein-related protein	2.6
	415785	R82419	Hs.23603	ESTs, Moderately similar to ALU8_HUMAN A	2.6
	450608	AA010365	Hs.193229	ESTs	2.6
	425304	AA463844	Hs.31339	fibroblast growth factor 11	2.6
	432258	BE311856	Hs.274230	3'-phosphoadenosine 5'-phosphosulfate sy	2.6
35	410507	AA355288	Hs.40834	transitional epithelia response protein	2.6
	427343	AI880044	Hs.176977	protein kinase C binding protein 2	2.6
	420917	AW135716	Hs.117330	ESTs	2.6
	414399	L47345	Hs.155202	transcription elongation factor B (SII)	2.6
40	446089	AI890021	Hs.270651	ESTs, Moderately similar to A47582 B-cell	2.6
	440829	AF136407	Hs.7446	chromosome 6 open reading frame 6	2.6
	408475	AA315514	Hs.47986	hypothetical protein MGC10940	2.6
	450946	AA374569	Hs.127698	ESTs, Moderately similar to 2109260A B c	2.6
	421452	AF016495	Hs.104624	aquaporin 9	2.6
	434846	AW295389	Hs.119768	ESTs	2.6
45	422887	AI751848	Hs.49215	ESTs	2.6
	417435	NM_005181	Hs.82129	carbonic anhydrase III, muscle specific	2.6
	437389	AL359587	Hs.271586	hypothetical protein DKFZp762M115	2.5
	408981	AW500797	Hs.49427	Gem-interacting protein	2.5
	432180	Y18418	Hs.272822	RuvB (E coli homolog)-like 1	2.5
50	418079	R40058	Hs.6911	ESTs	2.5
	437820	AA769082	Hs.323838	ESTs, Weakly similar to alternatively sp	2.5
	439585	AW956781	Hs.293937	ESTs, Weakly similar to FXD2_HUMAN FORKH	2.5
	425681	AB018297	Hs.159183	KIAA0754 protein	2.5
	435177	AI018174	Hs.42938	ESTs	2.5
55	437323	AA371145	Hs.226627	leptin receptor	2.5
	422114	AW194851	Hs.111801	arsenate resistance protein ARS2	2.6
	448478	AI523218	Hs.203456	ESTs	2.5
	426623	AA382826	Hs.132793	ESTs	2.5
	448764	AI568607	Hs.182112	ESTs	2.5
60	458385	AI051489	Hs.248214	ESTs	2.5
	403726	N28939	Hs.13434	Homo sapiens clone 24418 mRNA sequence	2.5
	444888	AI651039	Hs.148559	ESTs	2.5
	456179	H76490	Hs.271930	ESTs	2.5
	424840	D79987	Hs.153479	extra spindle poles, S. cerevisiae, homo	2.5
65	406273	NM_000919	Hs.83920	peptidylglycine alpha-amidating monooxyg	2.5
	418054	NM_002318	Hs.83354	lysyl oxidase-like 2	2.5
	445938	BE543594	Hs.61478	hypothetical protein FLJ22329	2.5
	454967	AW848276		gb:IL3-CT0214-150200-074-E06 CT0214 Homo	2.5
	442303	AA889289	Hs.129169	ESTs	2.5
70	456583	AF179897	Hs.104105	Mets (mouse) homolog 2	2.5
	434263	N34895	Hs.44648	ESTs	2.5
	416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	2.5
	424528	AW073971	Hs.238954	ESTs, Weakly similar to KIAA1204 protein	2.5
	406038	Y14443	Hs.68219	zinc finger protein 200	2.5
75	413485	Y12395	Hs.315177	Interferon-related developmental regulat	2.5
	423098	AA321980	Hs.204882	ESTs	2.5
	410817	AI262789	Hs.83659	protein disulfide isomerase related prot	2.5
	439841	AF038961	Hs.6710	mannose-P-dolichol utilization defect 1	2.5
	453828	AW970960	Hs.293821	ESTs	2.5
80	445034	AW293376	Hs.143659	ESTs	2.5
	449620	BE407797	Hs.23794	checkpoint with forkhead and ring finger	2.5
	406876	AI382286	Hs.180842	ribosomal protein L13	2.5
	412370	AW946614		gb:RC2-ET0021-2B0400-011-c05 ET0021 Homo	2.5
	423642	AW452650	Hs.157148	hypothetical protein MGC13204	2.5

	430357	AW976789	Hs.165607	ESTs	2.5
	414853	U31116	Hs.77501	sarcoglycan, beta (43kD dystrophin-assoc	2.5
	416097	BE387371	Hs.118964	hypothetical protein FLJ120085	2.5
	428619	AK002140	Hs.187378	hypothetical protein FLJ11278	2.5
5	413976	BE295452	Hs.75655	procollagen-proline, 2-oxoglutarate 4-di	2.5
	445223	AW291553	Hs.254983	ESTs	2.5
	423926	X03833	Hs.1722	interleukin 1, alpha	2.5
	410165	BE560228	Hs.71869	apoptosis-associated speck-like protein	2.5
	406474				2.5
10	433908	AW298141	Hs.157975	ESTs	2.5
	439755	AW748482	Hs.77873	B7 homolog 3	2.5
	437528	N59646	Hs.169745	crumbs (Drosophila) homolog 1	2.5
	420734	AW972872	Hs.293738	ESTs	2.5
	416346	Z43108		gb:HSC13E071 normalized infant brain cDN	2.5
15	419337	AW291112	Hs.209978	ESTs	2.5
	444606	R09478	Hs.18041	ESTs	2.5
	430061	AB037817	Hs.230188	KIAA1396 protein	2.5
	413407	AJ356293	Hs.75339	inositol polyphosphate phosphatase-like	2.5
	411965	BE467339	Hs.280115	ESTs	2.5
20	409278	AA346683	Hs.52763	anaphase-promoting complex subunit 7	2.5
	403142				2.5
	401714				2.5
	425081	X74794	Hs.154443	minichromosome maintenance deficient (S.	2.5
25	416505	H66470	Hs.16004	ESTs	2.5
	431518	AA743462	Hs.165337	ESTs	2.5
	448623	BE613468	Hs.107515	ESTs, Weakly similar to T00329 hypotheti	2.5
	428301	AW628666	Hs.98440	ESTs, Weakly similar to I38022 hypotheti	2.5
	404366				2.5
30	449733	R74546	Hs.29438	Homo sapiens cDNA FLJ12094 fis, clone HE	2.5
	459583	AJ907873		gb:IL-BT152-080399-004 BT152 Homo sapien	2.5
	402856	AW539659		gb:RC0-DT0076-110100-031-c09 DT0076 Homo	2.5
	420751	J03019	Hs.99913	adrenergic, beta-1-, receptor	2.4
	435805	AA731533	Hs.270751	ESTs	2.4
35	420285	AA258124	Hs.293878	ESTs, Moderately similar to ZN91_HUMAN Z	2.4
	453496	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	2.4
	453853	AL040600	Hs.188083	ESTs	2.4
	407909	AW103988		gb:cd53e06.x1 NCL_CGAP_Ov23 Homo sapiens	2.4
	454630	BE142075		gb:CM3-HT0137-170999-012-402 HT0137 Homo	2.4
40	451026	AA013218	Hs.157492	cer-d4 (mouse) homolog	2.4
	420779	L12398	Hs.99922	dopamine receptor D4	2.4
	438322	AA804170	Hs.221349	ESTs	2.4
	455908	BE156306		gb:QV0-HT0367-150200-114-h04 HT0367 Homo	2.4
	419625	U91616	Hs.91640	nuclear factor of kappa light polypeptid	2.4
45	440773	AA352702	Hs.332541	Homo sapiens, Similar to RUKEN cDNA 2700	2.4
	450823	T81223	Hs.22011	complement-c1q tumor necrosis factor-rel	2.4
	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13090 fis, clone NT	2.4
	429109	AL008637	Hs.198352	neutrophil cytosolic factor 4 (40kD)	2.4
	451802	AI817711	Hs.209374	ESTs	2.4
50	419417	R92491	Hs.39429	ESTs	2.4
	407094	AF000574	Hs.22405	leukocyte immunoglobulin-like receptor,	2.4
	423567	BE252949	Hs.69331	hypothetical protein FLJ13633	2.4
	427501	AI389280	Hs.131743	ESTs	2.4
	451773	Z42044	Hs.26996	KIAA1278 protein	2.4
55	436845	AA732297	Hs.113928	ESTs	2.4
	431584	AW298121	Hs.266263	Homo sapiens cDNA FLJ14115 fis, clone MA	2.4
	440614	AA781530	Hs.127236	hypothetical protein FLJ12879	2.4
	423721	AF176911	Hs.132004	cardiotrophin-like cytokine; neurotrophil	2.4
	452125	BE312642	Hs.28077	GDP-mannose pyrophosphorylase B	2.4
60	419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C (CFTR	2.4
	453448	BE299998		gb:600944574F1 NIH_MGC_17 Homo sapiens c	2.4
	419792	AA250890	Hs.190037	ESTs	2.4
	452786	R61352	Hs.106642	ESTs, Weakly similar to T09052 hypotheti	2.4
	410447	AW818134		gb:MR3-ST0220-290100-016-e04 ST0220 Homo	2.4
65	438862	AA223599	Hs.6351	cleavage and polyadenylation specific fa	2.4
	402408				2.4
	443950	NM_001425	Hs.9999	epithelial membrane protein 3	2.4
	414625	AA335738	Hs.76686	glutathione peroxidase 1	2.4
	403048				2.4
70	432088	AA525454		gb:u85c09.s1 NCL_CGAP_Pr20 Homo sapiens	2.4
	431692	AL021331	Hs.267749	unc93 (C.elegans) homolog A	2.4
	455023	AW850907		gb:IL3-CT0220-310100-055-H11 CT0220 Homo	2.4
	426249	F05422	Hs.168352	nucleoporin-like protein 1	2.4
	446795	AJ797713	Hs.156471	ESTs	2.4
75	414774	X02419	Hs.77274	plasminogen activator, urokinase	2.4
	414252	AA346483	Hs.128191	ESTs	2.4
	417918	AA209205	Hs.163754	hypothetical protein FLJ12606	2.4
	427550	BE242818	Hs.179606	nuclear RNA helicase, DECD variant of DE	2.4
	404020				2.4
80	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	2.4
	417222	AI525424	Hs.42053	hypothetical protein MGC2383	2.4
	443639	BE269042	Hs.9881	proteasome (prosome, macropain) subunit,	2.4
	452706	AW449390	Hs.257150	ESTs, Moderately similar to SUR1_HUMAN S	2.4
	401678				2.4

	428882	AA436915	Hs.131748	ESTs, Moderately similar to ALU7_HUMAN A	2.4
	436277	R88520	Hs.120917	ESTs	2.4
	426271	AF026547	Hs.169047	chondroitin sulfate proteoglycan 3 (neur	2.4
	405353				2.4
5	409193	AA131483		gb:z008e05.r1 Stratagene neuroepithelium	2.4
	431431	AL085711	Hs.252953	Human DNA sequence from clone RP3-403A15	2.4
	407889	R34556	Hs.30800	ESTs, Weakly similar to S65657 alpha-1C-	2.4
	453335	AW857376	Hs.169238	glucosyltransferase 3 (galactoside 3(4)-L	2.4
10	450621	AW297288	Hs.55918	hypothetical protein FLJ11354	2.4
	418652	AL157485	Hs.91973	hypothetical protein	2.4
	421151	BE174431	Hs.63386	ESTs	2.4
	437848	AA773866	Hs.244569	esophagus cancer-related gene-2	2.4
	420681	AA847602	Hs.106510	ESTs, Moderately similar to ALU2_HUMAN A	2.4
	405288				2.4
15	453527	R49570	Hs.180236	ESTs	2.4
	429875	AA091815		gb:aa58b08.s1 Soares_NhHMPu_81 Homo sapi	2.4
	436360	AI962798	Hs.136754	ESTs	2.4
	418592	X99226	Hs.284153	Fanconi anemia, complementation group A	2.4
20	418991	AJ000098	Hs.94210	eyes absent (Drosophila) homolog 1	2.4
	449539	W80363	Hs.58446	ESTs	2.4
	419870	AW403911	Hs.266175	phosphoprotein associated with GEMs	2.4
	404584				2.4
	454276	AW294998	Hs.255374	ESTs	2.4
25	423748	AW361817	Hs.132370	NADPH oxidase 1	2.4
	415558	AA885143	Hs.125719	ESTs	2.4
	428141	D60402	Hs.182611	solute carrier family 11 (proton-coupled	2.4
	406953	L36847		gb:Human (clone p17/90) rearranged iduro	2.4
	444471	AB020684	Hs.11217	KIAA0877 protein	2.4
30	451031	AI360187	Hs.4254	ESTs	2.4
	455302	AW997641		gb:RC6-BN0052-170200-011-D08 BN0052 Homo	2.4
	449063	AJ627352	Hs.236547	Homo sapiens, clone IMAGE:2905978, mRNA,	2.4
	401048				2.4
	434420	AA688278	Hs.194864	hypothetical protein FLJ22578	2.4
35	425848	BE242709	Hs.159337	valyl-tRNA synthetase 2	2.4
	449086	AI628357	Hs.208037	ESTs	2.4
	415238	R37780	Hs.21422	ESTs	2.4
	448337	AW208453	Hs.3782	ESTs	2.4
	416991	N36389	Hs.141296	KIAA0226 gene product	2.3
40	412600	L28824	Hs.74101	spleen tyrosine kinase	2.3
	418385	AW590813	Hs.301040	Homo sapiens, clone IMAGE:3357127, mRNA,	2.3
	440769	BE561793	Hs.21446	KIAA1716 protein	2.3
	450437	X13958	Hs.24998	hypothetical protein MGC10471	2.3
	412035	N78559	Hs.293629	hypothetical protein MGC3121	2.3
45	406739	AI566709	Hs.182426	ribosomal protein S2	2.3
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	2.3
	410286	AJ739159	Hs.81898	DKFZP586N2124 protein	2.3
	443740	R56434	Hs.21062	ESTs	2.3
	405805				2.3
50	416913	AW934714		gb:RC1-DT0001-031299-011-e11 DT0001 Homo	2.3
	426509	M31166	Hs.2050	pentaxin-related gene, rapidly induced b	2.3
	445828	P05802	Hs.81907	ESTs	2.3
	457195	AB011099	Hs.195647	KIAA0527 protein	2.3
	420372	AW960049	Hs.293660	Homo sapiens, clone IMAGE:3535476, mRNA,	2.3
55	423198	M81933	Hs.1634	cell division cycle 25A	2.3
	457730	AW753813		gb:RC1-CT0268-060100-013-e01 CT0268 Homo	2.3
	412014	AI620650	Hs.43761	ESTs, Weakly similar to A46010 X-linked	2.3
	447131	NM_004585	Hs.17466	retinoic acid receptor responder (tazero	2.3
	446288	AW189209	Hs.149708	ESTs	2.3
60	436954	AA740151	Hs.130425	ESTs	2.3
	411658	AW855598		gb:CM1-CT0278-031199-032-e08 CT0278 Homo	2.3
	404240				2.3
	456094	H95091		gb:yw57a09.r1 Soares_placenta_8to9weeks_	2.3
	416951	AA190926	Hs.190785	ESTs, Moderately similar to S65657 alpha	2.3
65	406737	AI356586		gb:xy15h09.x1 NCL_CGAP_Bm23 Homo sapien	2.3
	458453	AI097452	Hs.135095	ESTs	2.3
	452330	AI679127	Hs.191979	KIAA1733 protein	2.3
	408523	AW833259	Hs.314287	ESTs	2.3
	455470	AW847992		gb:PM0-MT0011-240300-001-c09 MT0011 Homo	2.3
70	436323	R17697	Hs.140963	ESTs, Weakly similar to I38022 hypotheti	2.3
	450000	AI952797	Hs.10888	hypothetical protein FLJ21709	2.3
	418171	H23895	Hs.125780	leucine-rich repeat-containing 2	2.3
	419134	T89863	Hs.221771	ESTs	2.3
	445933	AV655733	Hs.293860	spindler-like protein	2.3
75	422089	AA523172	Hs.103135	ESTs, Weakly similar to SFR4_HUMAN SPLC	2.3
	449911	AI262106	Hs.12653	ESTs	2.3
	417079	U65590	Hs.81134	interleukin 1 receptor antagonist	2.3
	411742	AW247593	Hs.71819	eukaryotic translation initiation factor	2.3
	435615	Y15065	Hs.4975	potassium voltage-gated channel, KQT-lik	2.3
80	423491	AA191765	Hs.125673	eukaryotic translation initiation factor	2.3
	407182	AA312551	Hs.230157	ESTs	2.3
	411448	AA178955	Hs.271439	ESTs, Weakly similar to I38022 hypotheti	2.3
	436644	AI126162	Hs.129037	ESTs	2.3
	432691	U29725	Hs.3080	mitogen-activated protein kinase 7	2.3

	452198	AI097560	Hs.61210	ESTs, Weakly similar to I38022 hypothe	2.3
	411125	AA151647	Hs.68877	cytochrome b-245, alpha polypeptide	2.3
	404054				2.3
5	430458	AA479300	Hs.225706	ESTs, Weakly similar to I38022 hypothe	2.3
	440210	AW674562	Hs.125296	ESTs	2.3
	446727	AB011095	Hs.15032	KIAA0523 protein	2.3
	453775	NM_002916	Hs.35120	replication factor C (activator 1) 4 (37	2.3
	438379	N23018	Hs.171391	C-terminal binding protein 2	2.3
10	449919	AI674685	Hs.200141	ESTs	2.3
	415293	R49462	Hs.106541	ESTs	2.3
	441126	NM_000429	Hs.323715	methionine adenosyltransferase I, alpha	2.3
	408203	AA053137	Hs.42390	nasopharyngeal carcinoma susceptibility	2.3
	434941	AW073202	Hs.334825	Homo sapiens cDNA FLJ14752 fs, clone NT	2.3
	450748	AI733093	Hs.130016	ESTs	2.3
15	404185				2.3
	418327	U70370	Hs.84136	paired-like homeodomain transcription fa	2.3
	451370	AI791929	Hs.300782	ESTs	2.3
	400034				2.3
20	407723	AW071161	Hs.252873	ESTs	2.3
	431320	AW969474	Hs.183070	ESTs	2.3
	429271	AF039850	Hs.198515	dead ringer (Drosophila)-like 1	2.3
	453707	AW003879	Hs.126522	Homo sapiens, clone MGC:16722, mRNA, com	2.3
	419225	U70073		gb:HSU70073 Human Homo sapiens cDNA clon	2.3
25	444656	AI277924	Hs.145199	ESTs	2.3
	405741				2.3
	400917				2.3
	432567	AA736777	Hs.293770	ESTs	2.3
	437949	U78519	Hs.41654	ESTs, Weakly similar to A46010 X-linked	2.3
30	450514	AC005785	Hs.25059	A kinase (PRKA) anchor protein 8	2.3
	418400	BE243028	Hs.301989	KIAA0246 protein	2.3
	444019	BE173977	Hs.10098	putative nucleolar RNA helicase	2.3
	406326				2.3
	412077	NS1107	Hs.47199	ESTs, Weakly similar to FLJ00004 protein	2.3
	427647	W19744	Hs.180059	Homo sapiens cDNA FLJ20653 fs, clone KA	2.3
35	414528	AA148950	Hs.188836	ESTs	2.3
	414854	BE546797	Hs.51483	ESTs, Weakly similar to hypothetical pro	2.3
	420352	BE258835		gb:601117374F1 NIH_MGC_16 Homo sapiens c	2.3
	439467	AW292275	Hs.158365	ESTs	2.3
40	402627				2.3
	451711	AK000461	Hs.26890	cat eye syndrome chromosome region, cand	2.3
	424308	AW975531	Hs.154443	minichromosome maintenance deficient (S.	2.3
	423869	BE409301	Hs.134012	C1q-related factor	2.3
	405915				2.3
45	431503	NM_012129	Hs.258576	claudin 12	2.3
	423306	W88562	Hs.108198	ESTs	2.3
	443232	AF161521	Hs.9081	phenylalanyl-tRNA synthetase beta-subuni	2.3
	433064	D79991	Hs.30002	SH3-containing protein SH3GLB2; KIAA1848	2.3
	434437	AI912566	Hs.187813	ESTs	2.3
50	436191	BE407866	Hs.170253	hypothetical protein FLJ23282	2.3
	420006	H14429	Hs.94300	serologically defined colon cancer antig	2.3
	447942	F12628	Hs.334786	hypothetical protein MGC16040	2.3
	403166				2.3
	422119	AI277829	Hs.111882	KIAA0590 gene product	2.3
55	403751				2.3
	426451	AI908165	Hs.169946	GATA-binding protein 3	2.3
	427413	BE547647	Hs.177781	hypothetical protein MGC5618	2.3
	409091	AW970388	Hs.269423	ESTs	2.3
	440491	R35252	Hs.24944	ESTs, Weakly similar to 2109260A B cell	2.3
60	427722	AK000123	Hs.180479	hypothetical protein FLJ20116	2.3
	405747				2.3
	438210	AA780519	Hs.311601	EST	2.3
	404652				2.2
65	423524	AF055989	Hs.129738	potassium voltage-gated channel, Shaw-re	2.2
	426793	X89887	Hs.172350	HIR (histone cell cycle regulation defec	2.2
	444424	AI654684	Hs.196377	ESTs	2.2
	434031	BE384165	Hs.23723	pseudouridylate synthase 1	2.2
	427650	AW501245	Hs.252259	ribosomal protein S3	2.2
	435220	D50030	Hs.104	HGF activator	2.2
70	438279	AA805166	Hs.154762	HIV-1 rev binding protein 2	2.2
	424658	D83702	Hs.151573	cryptochrome 1 (photolyase-like)	2.2
	429961	BE246829	Hs.226770	DKFZP566C0424 protein	2.2
	442065	AI831229	Hs.128417	hypothetical protein FLJ14009	2.2
	415198	AW009480	Hs.943	natural killer cell transcript 4	2.2
75	420536	AL117455	Hs.275438	histone deacetylase 7A	2.2
	411263	BE297802	Hs.69360	kinesin-like 6 (mitotic centromere-assoc	2.2
	443753	AW367578	Hs.134749	ESTs	2.2
	423243	AA351938	Hs.23954	sin3-associated polypeptide, 18kD	2.2
	446572	AV659151	Hs.282961	ESTs	2.2
80	412247	AF022375	Hs.73793	vascular endothelial growth factor	2.2
	421040	AA715026	Hs.135280	ESTs	2.2
	426212	S71824	Hs.167988	neural cell adhesion molecule 1	2.2
	455584	BE007420		gb:PM3-BN0142-200300-001-c04 BN0142 Homo	2.2
	406851	AA609784	Hs.180255	major histocompatibility complex, class	2.2

5	444153	AK001610	Hs.10414	hypothetical protein FLJ10748	2.2
	419575	U43431	Hs.91175	topoisomerase (DNA) III alpha	2.2
	418672	L44284	Hs.159743	ESTs	2.2
	456261	AA210718	Hs.104157	ESTs, Weakly similar to KIAA0694 protein	2.2
	415737	AA167626	Hs.118743	ESTs	2.2
10	447554	AI391598	Hs.36119	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.2
	406159				2.2
	442177	AW661820	Hs.211413	ESTs	2.2
	446139	H77395	Hs.39749	ESTs	2.2
	458339	AW976853	Hs.172843	ESTs	2.2
15	401876				2.2
	439566	AF086387		gb:Homo sapiens full length insert cDNA	2.2
	425079	H09963	Hs.2257	vitronectin (serum spreading factor, som	2.2
	441837	AA361743	Hs.179881	core-binding factor, beta subunit	2.2
	430644	AB015419	Hs.247710	preproprotactin-releasing peptide	2.2
20	431474	AL133990	Hs.190642	ESTs	2.2
	407739	NM_002285	Hs.38070	lymphoid nuclear protein related to AF4	2.2
	424244	AV647184	Hs.143601	hypothetical protein hCLA-Iso	2.2
	438057	AW294544	Hs.125785	ESTs, Weakly similar to CORB MOUSE CORN1	2.2
	412715	NM_000947	Hs.74519	primase, polypeptide 2A (58kD)	2.2
25	422365	AF035537	Hs.115521	REV3 (yeast homolog)-like, catalytic sub	2.2
	404170				2.2
	406902	M32074		gb:Human retinoic acid receptor gamma 2	2.2
	437902	AA770599	Hs.144055	ESTs	2.2
	401012				2.2
30	446502	AI302654	Hs.208024	ESTs	2.2
	442554	AW467376	Hs.129640	ESTs	2.2
	443021	AA368546	Hs.8904	Ig superfamily protein	2.2
	421141	AW117261	Hs.125914	ESTs	2.2
	443070	BE388662	Hs.8984	Homo sapiens chromosome 14 BAC 98L12	2.2
35	446566	H95741	Hs.17914	membrane-spanning 4-domains, subfamily A	2.2
	427695	R88483	Hs.172862	ESTs	2.2
	426503	AA380153		gb:EST93093 Skin tumor 1 Homo sapiens cD	2.2
	431468	AW248431	Hs.256526	nuclear prelamin A recognition factor	2.2
	416185	AW975861	Hs.47367	KIAA1785 protein	2.2
40	437319	BE410958	Hs.56406	Homo sapiens cDNA FLJ13549 fis, clone PL	2.2
	402064				2.2
	413335	AI613318	Hs.48442	ESTs	2.2
	408212	AA297567	Hs.43728	hypothetical protein	2.2
	406169				2.2
45	451099	R52785	Hs.25954	interleukin 13 receptor, alpha 2	2.2
	407335	AA631047	Hs.158761	Homo sapiens cDNA FLJ13054 fis, clone NT	2.2
	409715	W42591	Hs.23892	ESTs	2.2
	431921	N46466	Hs.58879	ESTs	2.2
	443823	BE089782	Hs.9877	hypothetical protein	2.2
50	432458	AI968598	Hs.78768	malignant cell expression-enhanced gene/	2.2
	419726	U50330	Hs.1274	bone morphogenetic protein 1	2.2
	423178	AI033140	Hs.124983	Homo sapiens mRNA: cDNA DKFZp564C142 (fr	2.2
	451089	AA903705	Hs.4190	Homo sapiens cDNA: FLJ23269 fis, clone C	2.2
	415216	AI825905	Hs.193211	Homo sapiens cDNA FLJ11421 fis, clone HE	2.2
55	442242	AV647908	Hs.90424	Homo sapiens cDNA: FLJ23285 fis, clone H	2.2
	441830	AA383104	Hs.42954	hypothetical protein DKFZp564D0372	2.2
	406660	X65371	Hs.172550	polypyrimidine tract binding protein (he	2.2
	443378	AW392550	Hs.9280	proteasome (prosome, macropain) subunit,	2.2
	432558	R97268	Hs.177269	ESTs	2.2
60	408146	R45621	Hs.81057	hypothetical protein MGC2718	2.2
	419885	NM_007020	Hs.93502	U1-snRNP binding protein homolog (70kD)	2.2
	439444	AI277652	Hs.54578	ESTs, Weakly similar to I38022 hypotheti	2.2
	438407	AI457122	Hs.129673	eukaryotic translation initiation factor	2.2
	450184	W31096	Hs.237617	Homo sapiens, clone IMAGE:3447394, mRNA,	2.2
65	409130	BE076601	Hs.75658	phosphorylase, glycogen; brain	2.2
	428844	AW972635	Hs.301904	hypothetical protein FLJ12671	2.2
	429489	AF008203	Hs.204039	aristless-like homeobox 3	2.2
	433042	AW193534	Hs.281895	Homo sapiens cDNA FLJ11660 fis, clone HE	2.2
	440658	H29142	Hs.143032	ESTs, Weakly similar to neuronal thread	2.2
70	408204	AA454501	Hs.43666	protein tyrosine phosphatase type IVA, m	2.2
	427498	NM_003926	Hs.178728	methyl-CpG binding domain protein 3	2.2
	408006	H57654	Hs.303345	ESTs, Weakly similar to I38022 hypotheti	2.2
	445703	AV654845	Hs.27	glycine dehydrogenase (decarboxylating;	2.2
	431446	AW294929	Hs.255369	Homo sapiens cDNA FLJ10265 fis, clone HE	2.2
75	456660	AA909249	Hs.112282	solute carrier family 30 (zinc transport	2.2
	433099	NM_002504	Hs.3187	nuclear transcription factor, X-box bind	2.2
	415857	AA866115	Hs.127797	Homo sapiens cDNA FLJ11381 fis, clone HE	2.2
	415245	N59650	Hs.27252	ESTs	2.2
	443657	R14973		gb:y142110.s1 Soares fetal liver spleen	2.2
80	402521	AW501216	Hs.108945	KIAA0515 protein	2.2
	414819	BE177320	Hs.156148	hypothetical protein FLJ13231	2.2
	446530	AV658909	Hs.282642	ESTs	2.2
	415797	AI291896	Hs.72800	ESTs	2.2
	414812	X72755	Hs.77367	monokine induced by gamma interferon	2.2
	453028	AB006532	Hs.31442	RecQ protein-like 4	2.2
	412133	U83460	Hs.73614	solute carrier family 31 (copper transpo	2.2
	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfot	2.2

5	437033	AW248364	Hs.5409	RNA polymerase I subunit	2.2
	422732	AA577455	Hs.24937	transformer-2 alpha (htra-2 alpha)	2.2
	416388	AI417358	Hs.73677	ESTs	2.2
	452849	AF044924	Hs.30792	hook2 protein	2.2
	446615	BE513202	Hs.15589	PPAR binding protein	2.2
10	428351	NM_015905	Hs.183858	transcriptional intermediary factor 1	2.2
	446279	AA490770	Hs.182382	ESTs	2.2
	422938	NM_001809	Hs.1594	centromere protein A (17kD)	2.2
	403969				2.2
	410423	AW402432	Hs.63489	protein tyrosine phosphatase, non-recept	2.2
15	429736	AF125304	Hs.212680	tumor necrosis factor receptor superfamily	2.2
	447091	AW089648	Hs.157779	ESTs, Weakly similar to CA17_HUMAN COLLA	2.2
	422017	NM_003877	Hs.110776	STAT induced STAT inhibitor-2	2.2
	426728	NM_007118	Hs.171957	triple functional domain (PTPRF) interact	2.2
	438726	AB033103	Hs.6385	KIAA1277 protein	2.2
20	453315	BE544203	Hs.24831	ESTs	2.2
	423244	AL039379	Hs.209602	ESTs, Weakly similar to ubiquitous TPR m	2.2
	433610	AA080822	Hs.112547	ESTs	2.2
	429451	BE409861	Hs.202833	heme oxygenase (decycling) 1	2.2
	417980	R32235		gb:Y67108.r1 Soares placenta Nb2HP Homo	2.2
25	406347				2.2
	414406	BE297904		gb:601177814F1 NIH_MGC_17 Homo sapiens c	2.2
	401827				2.2
	446913	AA430650	Hs.16529	transmembrane 4 superfamily member (letr	2.2
	452294	AI871925	Hs.117895	ESTs, Moderately similar to A47582 B-cel	2.2
30	404084				2.2
	456786	AK002084	Hs.132851	hypothetical protein FLJ11222	2.2
	435031	AI632091	Hs.116877	ESTs	2.1
	442609	AL020996	Hs.8518	setanoprotein N	2.1
	439732	AW629604	Hs.167641	hypothetical protein from EUROIMAGE 1703	2.1
35	421506	BE302796	Hs.105097	thymidine kinase 1, soluble	2.1
	439253	AF086064	Hs.332252	ESTs	2.1
	409669	AW177551	Hs.220255	hypothetical protein MGC13098	2.1
	429574	BE268321	Hs.208912	hypothetical protein MGC861	2.1
	437470	AL390147	Hs.134742	hypothetical protein DKFZp547D065	2.1
40	408945	AW015089	Hs.4964	DKFZP588J1624 protein	2.1
	447687	AI627947	Hs.150186	hypothetical protein DKFZp566K1948	2.1
	459584	AI910884	Hs.207898	ESTs	2.1
	439130	AA306090	Hs.124707	ESTs	2.1
	426180	AI129767	Hs.182874	guanine nucleotide binding protein (G pr	2.1
45	442028	AI239437	Hs.48945	ESTs	2.1
	430968	AW972830		gb:EST384925 MAGE resequences, MAGL Homo	2.1
	443609	AV650231	Hs.282941	ESTs, Highly similar to A Chain A, Human	2.1
	417164	AA338283	Hs.81361	heterogeneous nuclear ribonucleoprotein	2.1
	444534	AW271626	Hs.42294	ESTs	2.1
50	438391	AI262248	Hs.25027	ESTs	2.1
	442003	AW297497	Hs.201891	ESTs	2.1
	456278	BE300369	Hs.289038	hypothetical protein MGC4126	2.1
	416976	BE243985	Hs.80680	major vault protein	2.1
	417810	D28419	Hs.82609	hydroxymethylbilane synthase	2.1
55	445242	BE156478	Hs.21108	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.1
	452712	AW838616		gb:RCS-LT0054-140200-013-D01 LT0054 Homo	2.1
	434926	BE543269	Hs.50252	mitochondrial ribosomal protein L32	2.1
	421564	AB007864	Hs.105850	KIAA0404 protein	2.1
	424927	AW973668	Hs.153850	hypothetical protein C321D2.4	2.1
60	432742	AA564453	Hs.162339	ESTs	2.1
	435958	H98180	Hs.117975	ESTs	2.1
	421531	AA713505	Hs.291769	ESTs	2.1
	410431	BE261320	Hs.158196	transcriptional adaptor 3 (ADA3, yeast h	2.1
	420503	AI570943	Hs.337546	ESTs	2.1
65	448127	AI478416	Hs.282883	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.1
	452897	BE066058	Hs.269233	ESTs, Moderately similar to I78885 serin	2.1
	447112	H17800	Hs.7154	ESTs	2.1
	406577				2.1
	437162	AW005505	Hs.5464	thyroid hormone receptor coactivating pr	2.1
70	451460	AI797550	Hs.209652	ESTs	2.1
	447402	H54520	Hs.18490	hypothetical protein FLJ20452	2.1
	435828	AA700705	Hs.13852	ESTs	2.1
	436396	AI683487	Hs.152213	wingless-type MMTV integration site fami	2.1
	420582	BE047878	Hs.99093	Homo sapiens chromosome 19, cosmid R2837	2.1
75	452020	AA722012	Hs.255757	ESTs, Weakly similar to AT2A_HUMAN POTEN	2.1
	415588	Z45481		gb:HSC2QE041 normalized infant brain cDN	2.1
	452620	AA436504	Hs.119286	ESTs	2.1
	457066	BE244613	Hs.158272	ESTs, Weakly similar to CA13 MOUSE COLLA	2.1
	435472	AW972330	Hs.283022	triggering receptor expressed on myeloid	2.1
80	431741	AA514783	Hs.191701	ESTs	2.1
	446840	AW294828	Hs.209203	ESTs	2.1
	440818	AI147060	Hs.146726	ESTs	2.1
	410174	AA306007	Hs.59461	DKFZP434C245 protein	2.1
	400822				2.1
	412760	AW379030	Hs.41324	ESTs	2.1
	410653	BE383768	Hs.65238	95 kDa retinoblastoma protein binding pr	2.1
	426925	NM_001196	Hs.315689	Homo sapiens cDNA: FLJ22373 fls, clone H	2.1

	424242	AA337476	Hs.293984	hypothetical protein MGC13102	2.1
	452560	BE077084	Hs.336432	ESTs	2.1
	456437	AJ924228	Hs.115185	ESTs, Moderately similar to PC4259 ferri	2.1
5	458922	BE501831	Hs.282053	ESTs	2.1
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	2.1
	419488	AA316241	Hs.90691	nucleophosmin/nucleoplasm 3	2.1
	411829	AW865749		gb:QV3-SN0021-100500-185-c03 SN0021 Homo	2.1
	457192	AL135682	Hs.22452	Homo sapiens mRNA for KIAA1737 protein,	2.1
10	422128	AW881145		gb:QV0-OT0033-010400-182-c07 OT0033 Homo	2.1
	452571	W31518	Hs.34685	ESTs	2.1
	423699	H41850	Hs.131846	PCAF associated factor 65 alpha	2.1
	406610				2.1
	453638	AW814998		gb:MR1-STD206-170400-024-h09 ST0206 Homo	2.1
15	418856	AA362658		gb:EST72900 Ovary II Homo sapiens cDNA 5	2.1
	437623	D63880	Hs.5719	chromosome condensation-related SMC-asso	2.1
	410908	AA121686	Hs.10592	ESTs	2.1
	420221	N25991	Hs.43725	ESTs	2.1
	424739	AA346108	Hs.221810	ESTs	2.1
20	425398	ALD49689	Hs.156369	hypothetical protein similar to tenascin	2.1
	424901	Z11933	Hs.182505	POU domain, class 3, transcription facto	2.1
	411096	U80034	Hs.68583	mitochondrial intermediate peptidase	2.1
	415635	F13168		gb:HSC3JF101 normalized infant brain cDN	2.1
	418181	U37012	Hs.83727	cleavage and polyadenylation specific fa	2.1
	407103	AA424881	Hs.256301	hypothetical protein MGC13170	2.1
25	454389	AW752571		gb:IL3-CT0213-170100-055-F02 CT0213 Homo	2.1
	400021				2.1
	439228	N51700		gb:yy72d01.s1 Soares_multiple_sclerosis_	2.1
	456505	AA504595	Hs.111418	ESTs	2.1
30	405258				2.1
	444645	A184564	Hs.101654	ESTs	2.1
	430246	A1269069	Hs.109268	hypothetical protein FLJ12552	2.1
	458687	AW024815	Hs.170088	GLUT4 enhancer factor	2.1
	403857				2.1
	400258				2.1
35	422221	AA306649	Hs.189370	FYN oncogene related to SRC, FGR, YES	2.1
	441054	AA913591	Hs.126480	ESTs	2.1
	452700	A1859390	Hs.288940	five-span transmembrane protein M83	2.1
	454806	AW809752		gb:MR4-ST0124-181299-020-b06 ST0124 Homo	2.1
40	448954	AB014564	Hs.22616	KIAA0664 protein	2.1
	443148	A1034357	Hs.211194	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.1
	453486	AL039201	Hs.173554	ubiquinol-cytochrome c reductase core pr	2.1
	437695	AA769202	Hs.192142	ESTs	2.1
	425449	X52056	Hs.157441	spleen focus forming virus (SFFV) provir	2.1
	447270	AC002551	Hs.331	general transcription factor IIIC, polyp	2.1
45	435677	AA694142	Hs.293726	ESTs, Weakly similar to TSGA RAT TESTIS	2.1
	436382	AW977063	Hs.250181	ESTs	2.1
	435837	A1689210	Hs.187276	Homo sapiens cDNA FLJ11431 fis, clone HE	2.1
	458287	AA987656	Hs.12867	ESTs	2.1
	423794	BE551781	Hs.231895	ESTs	2.1
50	408049	AW076098	Hs.74316	desmoplakin (DPI, DP11)	2.1
	402721				2.1
	451999	AW176401	Hs.27424	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	2.1
	417541	AJ992191	Hs.180040	hypothetical protein FLJ22439	2.1
55	414857	AW402389	Hs.920	modulator recognition factor I	2.1
	435760	AF231922	Hs.213004	chromosome 21 open reading frame 62	2.1
	428086	AL110193	Hs.224137	hypothetical protein	2.1
	447853	A1A34204	Hs.164285	ESTs, Weakly similar to AFG1_YEAST AFG1	2.1
	419034	NM_002110	Hs.89555	hemopoietic cell kinase	2.1
60	431019	NM_005249	Hs.2714	forkhead box G1B	2.1
	421064	A1245432	Hs.101382	tumor necrosis factor, alpha-induced pro	2.1
	416435	A1431301	Hs.179703	KIAA0129 gene product	2.1
	437014	AA808757	Hs.222531	ESTs, Weakly similar to S59501 interfero	2.1
	459369	T83080		gb:yd40e03.r1 Soares fetal liver spleen	2.1
	402239				2.1
65	412280	AW205116	Hs.272814	hypothetical protein DKFZp434E1723	2.1
	426012	AA387507	Hs.75874	pregnancy-associated plasma protein A	2.1
	438885	A1886558	Hs.184987	ESTs	2.1
	426076	AW962714		gb:EST374787 MAGE resequences, MAGG Homo	2.1
	404561				2.1
70	442932	AA457211	Hs.8858	bromodomain adjacent to zinc finger doma	2.1
	408175	W29089	Hs.19066	hypothetical protein DKFZp667O2416	2.1
	423867	AA331886		gb:EST35757 Embryo, 8 week I Homo sapien	2.1
	458604	W37944	Hs.4007	Sarcolemma-associated protein	2.1
75	409650	T08490	Hs.288969	HSCARG protein	2.1
	401729				2.1
	433675	AW977653	Hs.75319	ribonucleotide reductase M2 polypeptide	2.1
	456741	W37608	Hs.184492	ESTs	2.1
	417037	BE083936	Hs.80978	antigen identified by monoclonal antibod	2.1
80	415079	R43179	Hs.22895	hypothetical protein FLJ23548	2.1
	439262	AA832333	Hs.333045	ESTs	2.1
	403108				2.1
	436718	AW015227	Hs.289053	hypothetical protein FLJ14733	2.1
	440696	A1762757	Hs.187660	putative Rab5 GDP/GTP exchange factor ho	2.1



5	409745	AA077391		gb:7914E12 Chromosome 7 Fetal Brain cDNA	2.1
	453485	BE620712	Hs.33026	hypothetical protein PP2447	2.1
	418177	N44967	Hs.5663	ESTs	2.1
	457292	AI921270	Hs.334882	hypothetical protein FLJ14251	2.1
	454434	AA083558	Hs.261286	ESTs	2.1
	406085				2.1
	424441	X14850	Hs.147097	H2A histone family, member X	2.1
	422726	U11690	Hs.1572	faciogenital dysplasia (Aarskog-Scott sy	2.1
10	424576	BE154142	Hs.96833	ESTs	2.1
	423650	AL045228	Hs.130831	Homo sapiens mRNA; cDNA DKFZp434L137 (fr	2.1
	403509	AF231919	Hs.18759	KIAA0539 gene product	2.1
	441940	AW298115	Hs.128152	ESTs	2.1
	439190	AW978693	Hs.293811	ESTs	2.1
	417791	AW965339	Hs.111471	ESTs	2.1
15	423701	AA329856	Hs.143022	ESTs	2.1
	427239	BE270447	Hs.174070	ubiquitin carrier protein	2.1
	459642	BE243103		gb:TCAAP2E0949 Pediatric acute myelogeno	2.1
	450385	A1631024	Hs.24948	synuclein, alpha interacting protein (sy	2.1
20	425159	NM_004341	Hs.154868	carbamoyl-phosphate synthetase 2, aspart	2.1
	425591	AW294734	Hs.279727	Homo sapiens cDNA FLJ14035 fs, clone HE	2.1
	445101	T75202	Hs.12314	Homo sapiens mRNA; cDNA DKFZp586C1019 (f	2.1
	412811	H06382	Hs.21400	ESTs	2.1
	426369	AF134157	Hs.169487	Kreiser (mouse) maf-related leucine zip	2.1
25	435924	AW029203	Hs.181852	ESTs	2.1
	418388	R72332	Hs.29258	Homo sapiens cDNA FLJ11354 fs, clone HE	2.1
	452235	AL039743	Hs.28514	testes development-related NYD-SP21	2.1
	452313	Y00486	Hs.28914	adenine phosphoribosyltransferase	2.1
	450704	H85157	Hs.40696	ESTs	2.1
30	427539	AA405205	Hs.97960	ESTs, Weakly similar to T51146 ring-box	2.1
	402028				2.1
	405362				2.1
	414718	H95348	Hs.107987	ESTs	2.1
	433424	R68252	Hs.163566	ESTs	2.1
35	444875	AI200759	Hs.44737	ESTs	2.0
	449523	NM_000579	Hs.54443	chemokine (C-C motif) receptor 5	2.0
	456072	H54381		gb:yq89a03.s1 Soares fetal liver spleen	2.0
	436331	AI239495	Hs.120189	ESTs	2.0
40	448418	Z43704	Hs.21192	Homo sapiens clone 25155 mRNA sequence	2.0
	447250	AI878909	Hs.17883	protein phosphatase 1G (formerly 2C), ma	2.0
	448192	R43915	Hs.4958	ESTs	2.0
	448966	AW372914	Hs.86149	phosphoinositol 3-phosphate-binding prot	2.0
	408805	AF025374	Hs.46465	T-cell, immune regulator 1	2.0
	410790	AW803357		gb:IL2-UM0079-090300-050-A08 UM0079 Homo	2.0
45	436872	X15624		gb:Human H1 RNA	2.0
	432238	AL133057	Hs.274135	Homo sapiens mRNA; cDNA DKFZp434K1815 (f	2.0
	446307	T50083	Hs.9094	ESTs	2.0
	436588	AA759233	Hs.126506	ESTs	2.0
	452487	AW207659	Hs.6630	Homo sapiens cDNA FLJ13329 fs, clone OV	2.0
50	430420	AW140027	Hs.26373	Homo sapiens cDNA: FLJ23449 fs, clone H	2.0
	432036	AF224266	Hs.272373	interleukin 20	2.0
	414460	L00727	Hs.898	dystrophin myotonic-protein kinase	2.0
	433507	AI817336	Hs.191791	ESTs	2.0
	427964	AA418082	Hs.98286	ESTs, Weakly similar to T20655 hypotheti	2.0
55	443108	W86975	Hs.203707	ESTs	2.0
	434504	AI887341	Hs.121590	hypothetical protein FLJ12827	2.0
	454310	AW818390	Hs.175613	homolog of Xenopus Caspase	2.0
	443566	AI290284	Hs.159872	ESTs	2.0
	449722	BE280074	Hs.23960	cyclin B1	2.0
60	452682	AA456193	Hs.9071	progesterone membrane binding protein	2.0
	412362	AW945484	Hs.184252	ESTs, Weakly similar to ALU8_HUMAN ALU 5	2.0
	429341	X73874	Hs.2393	phosphorylase kinase, alpha 1 (muscle)	2.0
	435863	AF255346	Hs.62919	Jun dimerization protein p21SNFT	2.0
	400774	R58824	Hs.2186	eukaryotic translation elongation factor	2.0
65	453944	AW975369	Hs.292570	Homo sapiens, clone IMAGE:3502107, mRNA,	2.0
	419227	BE537383	Hs.89739	cholinergic receptor, nicotinic, beta po	2.0
	448529	T26460	Hs.22550	ESTs	2.0
	443205	AB011420	Hs.9075	serine/threonine kinase 17a (apoptosis-1	2.0
	439360	AA448488	Hs.336629	ribosomal protein L44	2.0
70	436660	AI658870	Hs.184513	ESTs	2.0
	449030	AI365582	Hs.57100	Homo sapiens mRNA for FLJ00016 protein,	2.0
	411048	AK001742	Hs.67991	hypothetical protein DKFZp434G0522	2.0
	406624	AF052762		gb:Homo sapiens clone csnag8-1 immunoglo	2.0
	450666	T99968	Hs.18799	ESTs, Weakly similar to I38022 hypotheti	2.0
75	446143	BE245342	Hs.306079	sec61 homolog	2.0
	437698	R61837	Hs.7990	ESTs, Moderately similar to I84505 catcl	2.0
	426607	AA382330	Hs.124223	ESTs	2.0
	449246	AW411209	Hs.23363	hypothetical protein FLJ10983	2.0
	422564	AI148006	Hs.222120	ESTs	2.0
80	432682	AI376400	Hs.159588	ESTs	2.0
	422140	BE295918	Hs.112193	mutS (E. coli) homolog 5	2.0
	408215	BE614290	Hs.43812	syntaxin 10	2.0
	417129	AI381800	Hs.300684	calcitonin gene-related peptide-receptor	2.0
	442772	AW503680	Hs.5957	Homo sapiens clone 24416 mRNA sequence	2.0

5	434928	AW015595	Hs.4267	Homo sapiens clones 24714 and 24715 mRNA	2.0
	411380	AW841619		gb:RC1-CN0017-120200-012-b09 CN0017 Homo	2.0
	430603	AA148184	Hs.247280	HBV associated factor	2.0
	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger)	2.0
	401125				2.0
	412939	AW411491	Hs.2186	eukaryotic translation elongation factor	2.0
	448740	BE250632	Hs.8026	sestrin 2	2.0
	454390	AB020713	Hs.56966	KIAA0906 protein	2.0
10	415012	NM_004383	Hs.77793	c-src tyrosine kinase	2.0
	410407	X66839	Hs.63287	carbonic anhydrase IX	2.0
	403478				2.0
	456485	AI393037	Hs.97871	Homo sapiens, clone IMAGE:3845253, mRNA,	2.0
	430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	2.0
	411669	BE612676	Hs.303116	stromal cell-derived factor 2-like 1	2.0
15	451944	AW445218	Hs.210876	ESTs	2.0
	436395	AJ227900		gb:Homo sapiens partial mRNA; ID EEE2-168	2.0
	456457	AA252905	Hs.194477	E3 ubiquitin ligase SMURF2	2.0
	449123	D50920	Hs.23106	KIAA0130 gene product	2.0
20	409214	AW405967	Hs.333388	Homo sapiens, clone IMAGE:3957135, mRNA,	2.0
	437619	AW351491	Hs.334853	hypothetical protein FLJ23544	2.0
	453348	BE272318	Hs.8595	hypothetical protein FLJ12438	2.0
	424382	AA351898	Hs.23539	ESTs	2.0
	447079	AA280057	Hs.105280	ESTs, Weakly similar to dJ963K23.2 [H.s]	2.0
25	449501	AI652924	Hs.231942	ESTs	2.0
	422893	X98411	Hs.121555	myosin IF	2.0
	412125	Y17114	Hs.73393	eyes absent (Drosophila) homolog 4	2.0
	434845	BE267057	Hs.325321	hypothetical protein R32184_1	2.0
	410422	AL042014	Hs.334698	Homo sapiens, clone MGC:15203, mRNA, com	2.0
30	430255	AK000703	Hs.323822	Homo sapiens mRNA for KIAA1551 protein,	2.0
	451656	BE327088	Hs.212752	ESTs	2.0
	442068	BE312673	Hs.314932	ESTs	2.0
	445846	AW197626	Hs.271901	ESTs, Moderately similar to S08686 finge	2.0
	442690	AI014727	Hs.160047	ESTs, Weakly similar to B28096 line-1 pr	2.0
35	454277	AW295069	Hs.31743	ESTs, Weakly similar to Z157_HUMAN ZINC	2.0
	426910	AA470023	Hs.190089	ESTs, Moderately similar to ALU1_HUMAN A	2.0
	402798				2.0
	404554				2.0

TABLE 9B:  
Pkey: Unique Eos probe identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

45	Pkey	CAT Number	Accession
	407909	1025254_1	AW103986 BE156395 BE156391 BE156190 BE156184 BE156388 BE156394
	408432	1058667_1	AW195262 R27868 AW811262
	409193	110747_1	AA131483 AA065156 AA076448
	409745	115237_1	AA077391 AI347618 AI361453 AI088754 AW207491 AW960912 AA921874 AA286833 AA150722 BE152353 AW188822 BE152450
50	410447	1203929_1	AW816134 BE063456 AW748795 BE150839
	410790	1221131_1	AW803357 AW803423 AW812233 R06814
	411256	1236790_1	AW834039 AW834040 AW834047 AW845410 BE003128 AW852479
	411380	1242343_1	AW841619 AW851958 AW854841 AW854825 AW854822 AW854830 AW854835 AW854826
	411632	1252361_1	AW855829 AW854805 AW854841 AW854825 AW854822 AW854830 AW854835 AW854826
55	411658	1252987_1	AW855598 AW855608 BE148763 BE148764 AW855645 AW855615 AW855596 AW855610 AW855601 AW855605
	411829	1260309_1	AW865749 BE179419 BE179492
	412225	1284108_1	AW902042 N77591
	412370	1291952_1	AW946614 AW946622 AW946663 AW946667 AW946615 AW946619
	412391	1292625_1	AW947710 AW947698 AW947697 AW947713
60	413257	1355963_1	BE075035 BE074999 BE075006 BE075005 BE075032 BE075008 BE075037
	413604	1379715_1	R51767 BE152515 Z44834 H23397
	414405	1443333_1	BE297904 BE294312
	414550	1460990_1	BE379808
65	415346	1534581_1	Z43108 F06295 R13085
	415406	1536026_1	T26510 F07926 R53367
	415586	1540116_1	Z45481 F12393 T74437
	415635	1540853_1	F13168 R21289 T77628
	415871	1626761_1	H98716 N90792 N24283
70	416913	163001_1	AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499
	417980	1712954_1	R32235 R32247 R32219
	418333	173_2	W92113 AA702794 BE044316 W91984 AA679375 T94184 AA679335 BE503126 AW502118 BE467367 AA584550 AW139964 R93353 AW088477
			AI887846 AW502624 W81697 W81696 AA447817 AA447667 F13631 AW268271 AA055366 AW629027 AA677404 AA831618 AI124782 AA889402
			AA765804 AA765530 AA055698 AA594019 AI267368 AA456946 R93354 AF264624 AW668618 AA601493
75	418856	179649_1	AA362858 AW863761 AA229428
	419217	182954_1	AA504571 AA235243 AA411737 AW969068 AA406543
	419225	1830274_1	U70073
	419311	183793_1	AA689591 AW974261 AA236240 AI077451 AA631399 AW974262
	420352	192979_1	BE258835 AW968316 AA258918 AW843305 R14744 AI580388 BE071923 R36280
80	422128	211994_1	AW881145 AA490718 M85637 AA304575 T06067 AA331991
	422156	212379_1	N34524 AA305071 AW954803 AA502335 AI433430 AI203597 AW026670 AW265323 AW850787 AA317554 AW993843 AW835572 AW385512
			AI334966 W32951 H82656 H53902 R88904 AW835732
			H80977 BE147695 AA305496 AW962366 AA436754
	422176	212714_1	AA828125 AA834883 AA330555
	423756	231725_1	AA331886 AW962659 AW962655 T89841
	423867	232732_1	

5	425189	247825_1	H16622 R17322 AA351959
	425517	252728_1	AF121178 BE162736 AA358827
	426076	260504_1	AW962714 AA369277 AA369278
	426413	266650_1	AA377823 AW954494 A1022688
	426503	268283_1	AA380153 AA380233 AW963529
	426531	268760_1	AA381071 AA381084 AA380862
	429875	310034_1	A1091815 AA460162 AA460761
	430968	326269_1	AW972830 AA527647 AA489820 AA570362
10	432088	341185_1	AA525454 H74039 R89502 T77379
	433532	368950_1	AW975367 AA598607 AA742735
	434559	38889_1	AF147315 AW173079 T53029
	435065	399329_1	BE064391 BE064395 AA663613 N99644
	436190	41555_1	AK001059 AA633055
	436395	41905_1	AJ227900 A1094933 AW051119 F00947
15	436532	421802_1	AA721522 AW975443 T93070
	436722	425758_1	AW975977 AA729469 AA747132
	436872	42851_1	X15624
	437034	431713_1	AA742643 AA808575 AW976668
20	439086	46852_1	AF085947 H70981 H78989
	439228	47001_1	N51700 AF086051 N51792
	439518	47334_1	W76326 AF086341 W72300
	439546	47360_1	AF088056 W76297 W72448
	439566	47387_1	AF086387 W77884 W72711
	439710	47550_1	AF085543 W96291 W96225
25	443657	576685_1	R14973 R14967 A1081006
	444168	593829_1	AW379879 A126285 H12014
	444386	604004_1	BE065183 A1144398 BE065367
	451129	859870_1	BE072881 BE072946 A1762181
30	452712	928309_1	AW838616 AW838660 BE144343 A1914520 AW888910 BE184854 BE184784
	453446	967533_1	BE299996 BE297115 BE270415 BE295214 BE296526
	453638	975649_1	AW814996 A1047199 AW850979
	453746	979731_1	AL120611 BE006190 BE006189
	454377	114761_1	AA076811 AW814764
35	454389	115682_1	AW752571 AW847602 AA077979
	454605	1226149_2	AW809752 AW810271 AW809944 AW810319 AW810215 AW810368 AW810167
	454630	1227352_1	BE142075 BE142148 BE142189 AW816249 BE142147 BE142002 BE142406 BE142094 BE142074 BE142347 BE142000 BE142375
			AW811189 BE142133
40	454631	1227443_1	AW811324 AW811325 AW811326 AW811333 AW811329 AW811328 AW811332 AW811339 AW811335
	454679	1228929_1	AW813110 AW813113
	454987	1247021_1	AW848276 AW848416 AW848160 AW847945 AW847947 AW848063 AW848113
	455023	1249188_1	AW850907 AW850901 AW850877
	455302	1276542_1	AW997641 AW891777
	455470	1292849_1	AW947992 AW947967 AW947950 AW947957 AW947953 AW947973 AW947966 AW947971 AW947947 AW947970 AW947995 AW947979 AW947952
45			AW947956
	455514	1321649_1	AW983871 BE090302 AW983867 AW983845 AW983860 AW983853 AW983852
	455530	1322298_1	AW984744 AW984759
	455584	1334741_1	BE007420 BE007419 BE007421 BE007422
	455778	1364506_1	BE068746 BE068802 BE068755 BE068876 BE068947 BE068881 BE068952
50	455908	1362301_1	BE156306 BE156188 BE156298 BE156377 BE156374
	456072	1470256_1	H54381 H54463 BE393262
	456094	1504780_1	H95091 C01228
	457374	328758_1	AA436662 AW897396 BE154814
	457578	359618_1	AA578027
55	457730	393905_1	AW753613 AW753857 BE150374 BE150693 BE150394 AA808851 AA650159 AA654653 BE150419

TABLE 9C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 N1\_position: Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	N1_position
400822	7465000	Plus	186223-188402,186878-187275
400859	9757499	Minus	91888-92018,98131-98294,99474-99570
400917	7283186	Minus	173258-173631
400992	8096828	Plus	140390-140822
401012	7230838	Minus	736-1137
401048	7232177	Plus	132430-132761
401125	8570296	Minus	126863-126984
401324	9863791	Plus	234057-234174
401384	6850939	Minus	58360-58545
401558	7139678	Plus	103510-104090
401626	8575943	Minus	238100-238432
401676	9965536	Plus	3891-4891
401714	6715702	Plus	96484-96681
401729	8134856	Minus	90651-90878
401827	2262095	Plus	94725-94860,98452-98660
401876	8099107	Plus	95913-96641
402028	7139781	Plus	88749-89237
402064	8117294	Plus	100159-100350,100445-100912
402239	7690131	Plus	38175-38304,42133-42266
402408	9796239	Minus	110326-110491

5	402424	9796344	Minus	64925-65073
	402516	9788099	Minus	195342-195511
	402604	9909420	Plus	20393-20767
	402627	9931216	Plus	12136-12272,16487-16628,17654-17798,18494-18621,18933-19089,20669-20790,21134-21298,22866-22973,23686-23820,26626-26895,29279-29469
10	402721	8969253	Minus	144428-144715
	402798	3355547	Plus	23596-23867
	402856	9801288	Minus	90119-90411
	403048	4210991	Plus	44275-44592,49658-49955
15	403108	8980955	Plus	93253-93667
	403142	9444521	Plus	89286-90131
	403166	9838127	Minus	67762-67940,68695-68856,70394-70507
	403478	9958258	Plus	116458-116564
20	403680	7331517	Minus	157184-157415
	403751	7229815	Minus	158794-160929
	403790	8084957	Minus	87826-87947,89835-90002
	403797	8098896	Minus	123065-125008
25	403857	7708910	Minus	2524-3408
	403881	7710245	Minus	107250-107685,108924-109213
	403951	7596976	Minus	110393-110603
	403969	8569909	Plus	31237-31375,32405-32506
30	404020	8655966	Minus	174449-174663
	404054	3548785	Plus	66713-69175
	404084	9944055	Plus	2795-2969
	404108	8247074	Minus	63603-64942
35	404170	9930793	Plus	168838-169248
	404185	4572584	Minus	129171-129327
	404240	5002624	Minus	116132-116407,116653-116922
	404295	9856663	Minus	75747-75947
40	404299	5738652	Minus	3826-4025
	404366	9964977	Plus	96589-96801
	404554	7243881	Plus	42637-42839
	404561	9795980	Minus	69039-70100
45	404584	9857511	Plus	138651-139153
	404589	9931665	Minus	32824-32985
	404642	9796810	Plus	102999-103145
	404652	9796969	Minus	108172-108296
50	404721	9856648	Minus	173763-174294
	404756	7706327	Plus	82849-83627
	404802	4581357	Minus	30093-30600
	404984	6939882	Plus	87221-87505
55	405159	9966252	Plus	79659-79804
	405258	7328310	Plus	129830-130076
	405288	6139075	Minus	126268-126436
	405353	2811095	Plus	118525-118892
60	405362	2337862	Minus	105008-105142,105980-106091,140445-140556,142519-142641
	405558	1621110	Plus	4502-4644,5983-6083
	405588	5002511	Plus	46180-46366
	405605	5836195	Minus	117070-117270
65	405701	4263751	Plus	93243-93384
	405741	9966947	Minus	156747-156875,156936-157208
	405747	8469069	Minus	153933-154060
	405771	7018349	Plus	91191-91254,91510-91589
70	405808	9929207	Plus	109758-111166
	405884	6758747	Plus	62383-62583
	405915	7712162	Minus	43717-43859
	406028	8312303	Minus	177469-177829
75	406085	9123888	Plus	18665-18843
	406169	6684220	Minus	12620-14251
	406267	7528342	Minus	2570-2731
	406326	9212385	Plus	84508-84655
80	406347	9255981	Plus	90900-91091
	406474	9795567	Plus	52758-53211
	406577	7711730	Plus	11377-11509
	406610	8312226	Plus	13096-13334

TABLE 10A: ABOUT 582 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES

Table 10A lists about 582 genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu3 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 3. The "average" normal CNS level was set to the 75th percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85th percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Key: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75th percentile normal central nervous system tissue to 85th percentile tumor

Key	ExAccn	UnigeneID	Unigene Title	R1
453655	AW860427	Hs.79059	transforming growth factor, beta receptor	138.7
417275	X63578	Hs.295449	parvalbumin	29.0
430829	AW451999	Hs.194024	ESTs	25.7

	410657	AF063228	Hs.65248	dynein, cytoplasmic, intermediate polypeptide	22.6
	419954	D14720	Hs.93883	myelin protein zero (Charcot-Marie-Tooth)	21.2
	459247	N46243	Hs.110373	ESTs, Highly similar to T42626 secreted	18.5
	416133	NM_001683	Hs.89512	ATPase, Ca <sup>++</sup> transporting, plasma membrane	15.5
5	416018	AW138239	Hs.78977	proprotein convertase subtilisin/kexin 1	15.2
	417167	AW206437	Hs.4290	ESTs	14.8
	433940	H06129	Hs.7459	cyclic AMP-regulated phosphoprotein, 21	13.4
	413324	V00571	Hs.75294	corticotropin releasing hormone	13.1
	439830	AA846666	Hs.151489	ESTs, Weakly similar to XE7_HUMAN PROTEIN	12.6
10	408068	AW148652	Hs.167398	ESTs	12.6
	412636	NM_004415	Hs.74316	desmoplakin (DPI, DPL)	12.5
	429096	AB011106	Hs.196012	KIAA0534 protein	12.2
	412638	AA910199	Hs.203838	ESTs	12.2
	423690	AA329648	Hs.23804	ESTs, Weakly similar to PN0099 son3 prot	12.1
15	456844	AJ264155	Hs.152881	CDP-diacylglycerol synthase (phosphatidyl)	11.9
	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	10.9
	442593	R39804	Hs.31961	ESTs	10.8
	446353	AJ290919	Hs.153681	ESTs	10.4
	420290	AW977318	Hs.194480	ESTs	10.3
20	414220	BE298094		gb:601118231F1 NIH_MGC_17 Homo sapiens c	10.3
	414290	AJ568801	Hs.71721	ESTs	10.2
	426365	AA376667	Hs.10283	RNA binding motif protein 88	10.0
	414937	R38598	Hs.12382	ESTs	10.0
25	419643	F06066	Hs.91791	chromosome 11 open reading frame 25	9.5
	407173	T64349		gb:yc10d08.s1 Striatogene lung (937210) H	9.5
	412454	R55745	Hs.167330	ESTs	9.5
	439366	AF100143	Hs.6540	fibroblast growth factor 13	8.4
	415315	F12240	Hs.250655	prothymosin, alpha (gene sequence 28)	9.3
30	441790	AW294909	Hs.132208	ESTs	9.2
	448117	H49129	Hs.172882	ESTs	9.1
	400661				9.0
	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypotheti	9.0
	412453	R20205	Hs.167330	ESTs	9.0
35	408920	AL120071	Hs.48998	fibronectin leucine rich transmembrane p	8.9
	409031	AA376836	Hs.76728	ESTs	8.7
	428106	BE620016	Hs.182470	PTD010 protein	8.3
	446544	AJ631932	Hs.7047	ESTs, Weakly similar to Unknown [H.sapia	8.2
	423479	NM_014326	Hs.129208	death-associated protein kinase 2	8.2
40	439480	AL038511	Hs.125316	ESTs, Weakly similar to S33990 finger pr	8.0
	418036	Z37976	Hs.83337	latent transforming growth factor beta b	8.0
	456490	U83171	Hs.97203	small inducible cytokine subfamily A (Cy	8.0
	410200	AA082557	Hs.101915	Stargardt disease 3 (autosomal dominant)	8.0
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	8.0
	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	7.9
45	437073	AJ885608	Hs.94122	ESTs	7.9
	408434	AW195317	Hs.107716	hypothetical protein FLJ22344	7.9
	438150	AA037534	Hs.79059	transforming growth factor, beta recepto	7.8
	440209	H05049	Hs.22269	neurexin 3	7.8
50	408119	W26213	Hs.101672	ESTs, Weakly similar to T00331 hypotheti	7.8
	417421	AL138201	Hs.82120	nuclear receptor subfamily 4, group A, m	7.8
	410587	AA370706	Hs.86412	chromosome 9 open reading frame 5	7.7
	429611	AJ889077	Hs.211388	Homo sapiens BAC clone CTB-60N22 from 7q	7.7
	405800				7.7
55	421750	AK000768	Hs.107872	hypothetical protein FLJ20761	7.7
	426356	BE536836	Hs.98682	hypothetical protein FKSG32	7.7
	423440	R25234	Hs.143434	contactin 1	7.6
	445148	AJ214510	Hs.146304	ESTs	7.6
	416294	D86980	Hs.79170	KIAA0227 protein	7.6
60	424087	N69333	Hs.143434	contactin 1	7.5
	437479	R61866	Hs.101277	ESTs	7.5
	405071				7.4
	421224	AW402154	Hs.125812	ESTs	7.4
	442025	AW887434	Hs.11810	CDA11 protein	7.2
65	459476	BE185844		gb:IL5-HT0731-110500-087-c08 HT0731 Homo	7.1
	430573	AA744550	Hs.136345	ESTs	7.1
	401836				7.1
	448958	AB020651	Hs.22653	KIAA0844 protein	7.1
	430152	AB001325	Hs.234642	aquaporin 3	7.1
	419474	AW988619	Hs.155849	ESTs	7.1
70	401780				7.0
	446052	AA358760		gb:EST67699 Fetal lung II Homo sapiens c	7.0
	423605	AF047826	Hs.129887	cadherin 19, type 2	7.0
	433098	AW190593	Hs.151143	ESTs	6.9
75	449511	AJ436187	Hs.296261	guanine nucleotide binding protein (G pr	6.8
	451285	AW137912	Hs.227583	Homo sapiens chromosome X map Xp11.23 L-	6.8
	428414	AL049980	Hs.184216	DKFZP564C152 protein	6.8
	419273	BE271180	Hs.293490	ESTs, Weakly similar to I38022 hypotheti	6.8
	443155	R54485	Hs.23772	ESTs	6.8
	450561	R49674	Hs.25909	ESTs	6.8
80	433068	NM_006456	Hs.288215	slalytransferase	6.8
	440729	AA904739	Hs.128204	ESTs	6.7
	448426	BE018315	Hs.280776	tankyrase, TRF1-interacting ankyrin-rela	6.6
	423569	AA328082	Hs.209569	ESTs	6.6

	415681	AI379882	Hs.72630	ESTs	6.5
	413510	F13044		gb:HSC3HH101 normalized infant brain cDN	6.4
	427992	Y15014	Hs.181353	UDP-Gal:betaGlcNAc beta 1,3-galactosyltr	6.4
	453344	BE349075	Hs.44571	ESTs	6.4
5	450642	R39773	Hs.7130	copine IV	6.4
	432251	AW972983	Hs.232165	polycythemia rubra vera 1; cell surface	6.4
	429322	D86984	Hs.199243	KIAA0231 protein	6.4
	444927	AW016637	Hs.199425	ESTs	6.4
	447482	AB033059	Hs.18705	KIAA1233 protein	6.4
10	400332	S66407	Hs.248032	FLT4	6.3
	440703	AL137663	Hs.7378	Homo sapiens mRNA; cDNA DKFZp434G227 (tr	6.3
	448129	AW244073	Hs.145946	ESTs	6.3
	454076	AW204712	Hs.61957	ESTs	6.3
15	425526	AA359933		gb:EST69040 Fetal lung II Homo sapiens c	6.3
	421913	AI934365	Hs.109439	osteoglycin (osteoidinductive factor, mime	6.2
	434273	AA913143	Hs.26303	ESTs	6.2
	408480	AI350337	Hs.164568	fibroblast growth factor 7 (keratinocyte	6.2
	451301	AI769514	Hs.209890	EST	6.2
20	430754	AW862610	Hs.157068	ESTs	6.2
	438356	AA805530	Hs.48527	ESTs	6.2
	422743	BE304678	Hs.119598	ribosomal protein L3	6.2
	453355	AW295374	Hs.31412	Homo sapiens cDNA FLJ11422 fis, clone HE	6.2
	426388	AW081394	Hs.97103	ESTs	6.1
25	452502	AI904296		gb:PM-BT046-220199-286_1 BT046 Homo sapi	6.1
	402548				6.1
	457534	AI761307	Hs.232226	ESTs	6.1
	408165	AL137573	Hs.43143	Homo sapiens mRNA; cDNA DKFZp564A2463 (f	6.1
	404958				6.1
30	432501	BE546532	Hs.25682	Homo sapiens mRNA for KIAA1863 protein,	6.1
	442979	AW440782	Hs.174743	ESTs	6.0
	422262	AL022315	Hs.113987	lectin, galactoside-binding, soluble, 2	6.0
	408713	NM_001248	Hs.47042	ectonucleoside triphosphate diphosphohyd	6.0
	454065	BE394588		gb:601311808F1 NIH_MGC_44 Homo sapiens c	5.9
35	430004	U27768	Hs.227571	regulator of G-protein signaling 4	5.9
	401521				5.9
	425087	R62424	Hs.126059	ESTs	5.9
	446298	AF187813	Hs.14637	kidney- and liver-specific gene	5.9
	417761	R13727	Hs.21435	ESTs	5.9
40	424806	AA382523	Hs.105689	MSTP031 protein	5.9
	441695	T12411	Hs.183745	hypothetical protein FLJ13456	5.9
	457483	AB034694	Hs.272558	endomucin-1	5.8
	417175	R44558	Hs.94002	ESTs	5.8
	437483	AL390174		gb:Homo sapiens mRNA; cDNA DKFZp547J184	5.8
45	436427	AI344378	Hs.143399	ESTs	5.8
	411939	AI365585	Hs.146246	ESTs	5.7
	459053	AI807052	Hs.210381	ESTs	5.7
	411052	AW814950		gb:MR1-ST0206-130400-023-d06 ST0206 Homo	5.7
	431063	Z98949	Hs.326843	hypothetical protein bk125H2.1	5.7
50	450082	AA397658	Hs.60257	Homo sapiens cDNA FLJ13598 fis, clone PL	5.7
	408478	NM_000806	Hs.45740	gamma-aminobutyric acid (GABA) A recepto	5.7
	442676	AI733585	Hs.130897	ESTs	5.7
	446443	AV659082	Hs.134228	ESTs	5.7
	400865				5.6
55	459080	AW192083	Hs.290855	ESTs	5.6
	407952	AI215902	Hs.88845	ESTs, Highly similar to T50835 hypotheti	5.6
	431984	AL080239	Hs.272284	Human DNA sequence from clone GS1-256022	5.6
	425705	AF007833	Hs.159265	kruppel-related zinc finger protein hckr	5.6
	442238	AW135374	Hs.270949	ESTs, Moderately similar to F41925 hypot	5.6
60	422994	AW891802	Hs.296276	ESTs	5.6
	457148	AF091035	Hs.184627	KIAA0118 protein	5.6
	428356	AL046991	Hs.10338	ESTs	5.5
	415927	AL120168	Hs.78919	Kell blood group precursor (McLeod pheno	5.5
	402092				5.5
65	440526	AI832243	Hs.211471	ESTs	5.5
	444409	AI792140	Hs.49265	ESTs	5.4
	417877	AI025829	Hs.86320	ESTs	5.4
	458238	AW071521	Hs.333541	beta-amyloid binding protein precursor	5.4
	430702	U56979	Hs.250651	H factor 1 (complement)	5.4
70	456189	H91010	Hs.44940	ESTs	5.4
	427424	AA402453	Hs.113011	ESTs	5.4
	437354	AA749215	Hs.291886	ESTs	5.4
	455617	BE078070		gb:CM1-BT0614-160300-149-f02 BT0614 Homo	5.3
	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	5.3
75	427881	AA813185	Hs.98183	ESTs	5.3
	408556	U9516	Hs.46362	5-hydroxytryptamine (serotonin) receptor	5.3
	444209	AI753134	Hs.146494	ESTs	5.3
	422831	R02504	Hs.332943	ESTs	5.3
	403180				5.3
80	418026	BE379727	Hs.83213	fatty acid binding protein 4, adipocyte	5.2
	430339	W28608	Hs.239625	integral membrane protein 2B	5.2
	431596	T34708	Hs.272927	Sec23 (S. cerevisiae) homolog A	5.2
	431930	AB035301	Hs.272211	cadherin 7, type 2	5.2
	437403	AI208149	Hs.121196	ESTs	5.2

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	438285	AA782845	Hs.22790	ESTs	5.2
	439901	N73885	Hs.124169	ESTs	5.2
	438507	AA809052	Hs.211275	ESTs	5.2
	449222	AW293984	Hs.197621	ESTs	5.2
5	402834	AK001507	Hs.306084	Homo sapiens clone FLB6914 PRO1821 mRNA,	5.2
	419042	T81429	Hs.221065	ESTs	5.2
	438777	AA731199	Hs.293130	ESTs	5.1
	445071	AJ280246	Hs.149504	ESTs	5.1
10	408016	AW136827	Hs.256096	ESTs	5.1
	412347	AA934589	Hs.49696	ESTs	5.1
	436953	AW959074	Hs.23648	Homo sapiens cDNA FLJ13097 fs, clone NT	5.1
	436773	AW078629	Hs.82110	PC4 and SFRS1 interacting protein 1	5.1
	409263	AA069573	Hs.50319	ESTs	5.1
	453830	AA534296	Hs.20953	ESTs	5.1
15	459580	AA022888	Hs.176065	ESTs	5.1
	417616	R07728	Hs.268668	ESTs	5.1
	423457	F08208	Hs.283844	similar to rat tricarboxylate carrier-5	5.0
	441535	AL135735	Hs.7885	phosphatidylinositol binding clathrin as	5.0
	416490	AF090116	Hs.79348	regulator of G-protein signaling 7	5.0
20	417284	NS2889	Hs.107242	Homo sapiens cDNA FLJ12965 fs, clone NT	5.0
	447135	T58148		gb:Y69606.s1 Stratagene lung (937210) H	5.0
	448605	AL109678	Hs.21597	Homo sapiens mRNA full length insert cDN	4.9
	442240	AJ791883	Hs.292719	ESTs	4.9
	459399	BE407712	Hs.153998	creatine kinase, mitochondrial 1 (ubiqui	4.9
25	427972	AA864870	Hs.181304	putative gene product	4.9
	432944	AA570687	Hs.38512	ESTs	4.9
	440198	BE560093		gb:601345159F1 NIH_MGC_8 Homo sapiens cD	4.9
	444047	AJ097452	Hs.135095	ESTs	4.9
30	416040	AW819158	Hs.289044	Homo sapiens cDNA FLJ12048 fs, clone HE	4.8
	444922	AJ921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL	4.8
	436670	AJ690021	Hs.201536	ESTs	4.8
	448072	AJ459306	Hs.24908	ESTs	4.8
	408936	AL138043	Hs.293549	ESTs	4.8
35	412622	AW664708	Hs.171959	ESTs	4.8
	414943	D80647	Hs.124193	ESTs	4.8
	429254	H10133	Hs.91846	hypothetical protein DKFZp761C121	4.8
	453567	AJ742835	Hs.33368	hypothetical protein FLJ11175	4.8
	407906	AA369665	Hs.41185	Homo sapiens mRNA; cDNA DKFZp564O1262 (I	4.7
40	441028	AJ333660	Hs.17558	Homo sapiens cDNA FLJ14446 fs, clone HE	4.7
	405130			gb:QV3-8N0046-150400-151-g09 BN0046 Homo	4.7
	455225	AW996689		gb:AV657159 GLC Homo sapiens cDNA clone	4.7
	446218	AV657159		melanoma-derived leucine zipper, extra-n	4.7
	443347	AJ052543	Hs.133244		4.7
45	402176				4.7
	416577	BE063207	Hs.79381	granulocin	4.7
	438221	AK001781	Hs.296543	Homo sapiens cDNA FLJ10919 fs, clone OV	4.7
	420480	AL137361	Hs.98173	hypothetical protein	4.6
	400800	Y10262	Hs.46925	eyes absent (Drosophila) homolog 3	4.6
	435161	AF124150	Hs.272091	ESTs	4.6
50	404793				4.6
	430895	U66581	Hs.248121	G protein-coupled receptor 22	4.6
	438571	AW020775	Hs.56022	ESTs	4.6
	445924	AJ264671	Hs.164166	ESTs	4.6
	444585	AW170015	Hs.6594	ESTs	4.6
55	421044	AF061871	Hs.311736	Human DNA sequence from clone RP1-238D15	4.6
	418274	AJ458587	Hs.128677	Human DNA sequence from clone RP1-50O24	4.6
	425475	W56339	Hs.107057	ESTs	4.5
	434311	BE543469	Hs.266263	Homo sapiens cDNA FLJ14115 fs, clone MA	4.5
60	414272	AJ651603	Hs.46988	ESTs	4.5
	445235	AJ564022	Hs.138207	ESTs	4.5
	414327	BE408145	Hs.185254	ESTs, Weakly similar to T24435 hypothe	4.5
	414630	BE410857		gb:601301177F1 NIH_MGC_21 Homo sapiens c	4.5
	414456	H74314		gb:yu56a10.r1 Soares fetal liver spleen	4.5
65	401024				4.5
	414699	AJ815523	Hs.76930	synuclein, alpha (non A4 component of am	4.5
	423449	AJ497900	Hs.33067	ESTs	4.5
	405138				4.5
	413544	BE147225		gb:PM2-HT0225-031299-003-111 HT0225 Homo	4.5
70	453880	AJ803166	Hs.28462	ESTs, Weakly similar to I38022 hypothe	4.4
	433521	T66087	Hs.112482	Homo sapiens unknown mRNA sequence	4.4
	441184	AA922009	Hs.150269	ESTs	4.4
	429876	AB028977	Hs.225974	KIAA1054 protein	4.4
	445481	AW661846	Hs.148836	ESTs	4.4
	452340	NM_002202	Hs.505	ISL1 transcription factor, LIM/homeodoma	4.4
75	404769				4.4
	444331	AW193342	Hs.24144	ESTs	4.4
	429726	AW628326	Hs.27151	ESTs	4.4
	449093	AB035358	Hs.22998	neurexin 1	4.4
80	451959	AA056203	Hs.27337	hypothetical protein FLJ20623	4.4
	415716	NS9294	Hs.179662	nucleosome assembly protein 1-like 1	4.4
	417888	R23053		gb:YH31a05.r1 Soares placenta Nb2HP Homo	4.4
	419656	AB002314	Hs.92025	KIAA0318 gene product	4.4
	425864	U56420	Hs.159903	olfactory receptor, family 5, subfamily	4.4

	435078	AW518888	Hs.40937	ESTs	4.4
	413493	BE144444		gb:MR0-HT0168-141199-002-09 HT0168 Homo	4.3
	432712	AB016247	Hs.288031	sterol-C5-desaturase (fungal ERG3, delta	4.3
	459650	R25754	Hs.301185	ESTs	4.3
5	404828				4.3
	423782	AJ472209	Hs.323117	ESTs	4.3
	426867	AA450967	Hs.22668	ESTs	4.3
	426802	AA385182	Hs.46699	ESTs	4.3
	457353	X65633	Hs.248144	melanocortin 2 receptor (adrenocorticot	4.3
10	412112	BE180342		gb:RC3-HT0622-130400-012-a07 HT0622 Homo	4.3
	401522	N47812	Hs.306198	CGI-35 protein	4.3
	419055	AJ365384	Hs.11571	Homo sapiens cDNA FLJ11570 fs, clone HE	4.3
	410171	H07892	Hs.12431	ESTs	4.3
	419564	U08989	Hs.91139	solute carrier family 1 (neuronal/epithe	4.3
15	458789	AL157468	Hs.325825	Homo sapiens cDNA FLJ20848 fs, clone AD	4.3
	455040	AW852286		gb:QV0-CT0225-100400-187-d08 CT0225 Homo	4.3
	438533	AJ440266	Hs.170673	ESTs, Weakly similar to T24832 hypotheti	4.2
	459005	AA447679	Hs.144558	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.2
	418489	U76421	Hs.85302	adenosine deaminase, RNA-specific, B1 (h	4.2
20	433389	AF038171		gb:Homo sapiens clone 23671 mRNA sequenc	4.2
	454356	AW390363	Hs.11522	hypothetical protein from Xq28	4.2
	442339	BE299668	Hs.227591	ESTs, Weakly similar to 1901303A Leu zip	4.2
	421249	AA285362		gb:HTH277 HTCOL1 Homo sapiens cDNA 5'/3'	4.2
	443998	AJ620661	Hs.296276	ESTs	4.2
25	452197	AW023595	Hs.232048	ESTs	4.2
	451117	AA015752	Hs.205173	ESTs	4.2
	404501	AW247252	Hs.75514	nucleoside phosphorylase	4.2
	410378	R23324	Hs.41693	DnaJ (Hsp40) homolog, subfamily B, membe	4.2
	422528	AB011182	Hs.118087	KIAA0610 protein	4.1
30	440323	AA970614	Hs.127992	ESTs	4.1
	425767	AF054176	Hs.159483	chromosome 1 open reading frame 7	4.1
	434460	AA478486	Hs.3852	KIAA0368 protein	4.1
	410362	H04811	Hs.93164	proprotein convertase subtilisin/kexin 1	4.1
	413121	T96090	Hs.142678	ESTs	4.1
35	409403	AA668224	Hs.6634	Homo sapiens cDNA: FLJ22547 fs, clone H	4.1
	450235	AA007512	Hs.17538	ESTs	4.1
	449754	H00820	Hs.30977	ESTs, Weakly similar to B34087 hypotheti	4.1
	421813	BE048255		gb:tz49b05.y1 NC1_CGAP_Bm52 Homo sapien	4.1
40	408496	AJ683802	Hs.138182	ESTs	4.1
	430261	AA305127	Hs.237225	hypothetical protein HT023	4.1
	434101	AA825205	Hs.259599	KIAA1822 protein	4.1
	451837	T92157	Hs.16970	ESTs	4.1
	411772	BE170301		gb:QV4-HT0538-040500-193-05 HT0536 Homo	4.1
	437630	AJ252782	Hs.153026	SWAP-70 protein	4.1
45	430212	AA469153		gb:nc6704.s1 NC1_CGAP_Pr1 Homo sapiens	4.0
	400216				4.0
	429830	AJ537278	Hs.225841	DKFZP434D193 protein	4.0
	453165	S74727	Hs.32042	asparitoacylase (aminoacylase 2, Canavan	4.0
	418047	R37633	Hs.4847	ESTs	4.0
50	405354				4.0
	427931	AW206512	Hs.186996	ESTs	4.0
	428775	AA434579	Hs.143691	ESTs	4.0
	449422	AA001373	Hs.59821	ESTs	4.0
55	453864	AW021407	Hs.21068	hypothetical protein	4.0
	456407	AW968614		gb:EST380690 MAGE resequences, MAGJ Homo	4.0
	441869	NM_003947	Hs.8004	huntingtin-associated protein Interactin	4.0
	420784	T65158	Hs.102399	ESTs, Moderately similar to S65657 alpha	4.0
	425195	AA352026	Hs.94319	VPS10 domain receptor protein	4.0
	429628	H09604	Hs.13268	ESTs	4.0
60	410087	F12079	Hs.332579	ESTs	4.0
	409840	AW502122		gb:UR-HF-BR0p-ai-c-08-Q-UIr1 NIH_MGC_5	4.0
	452854	AA437061	Hs.14060	prokineticin 1 precursor	4.0
	419910	AA662913	Hs.190173	ESTs, Weakly similar to A46010 X-linked	4.0
	427443	AA402713	Hs.97872	ESTs	3.9
65	414990	C17758	Hs.221652	Homo sapiens cDNA FLJ14323 fs, clone PL	3.9
	412678	AA115575	Hs.114914	ESTs	3.9
	405629				3.9
	420299	AJ056871	Hs.15276	ESTs	3.9
	453098	Z25935	Hs.86379	ESTs	3.9
70	435752	AF230801		gb:Homo sapiens growth hormone receptor	3.9
	441005	Z41305	Hs.303172	Homo sapiens mRNA: cDNA DKFZp547G133 (fr	3.9
	414516	AJ307802	Hs.135560	ESTs, Weakly similar to T43458 hypotheti	3.9
	442257	AW503831	Hs.323370	Human EST clone 25267 mariner transposon	3.9
	422563	BE299342	Hs.19348	hypothetical protein FLJ13119	3.9
75	406697	M21388	Hs.123017	Human unproductively rearranged Ig mu-ch	3.9
	443850	AW014723	Hs.334612	ESTs	3.9
	412677	AW029608	Hs.17384	ESTs	3.9
	422788	AL117352	Hs.120828	Human DNA sequence from clone RPS-676810	3.9
	405377				3.9
80	414376	BE393856	Hs.66915	ESTs, Weakly similar to 16.7Kd protein [	3.9
	453341	AJ758912	Hs.296341	adenylyl cyclase-associated protein 2	3.9
	431960	AW241821	Hs.301927	c6.1A	3.9
	416854	H40164	Hs.80296	Purkinje cell protein 4	3.9



	427264	AA400117	Hs.125747	ESTs	3.9
	422746	NM_004484	Hs.119651	glypican 3	3.9
	452346	BE243534		gb:TCBAP1D0885 Pediatric pre-B cell acut	3.9
5	414666	NM_004466	Hs.76828	glypican 5	3.8
	418217	AI910647	Hs.13442	ESTs	3.8
	419118	AA234223	Hs.139204	ESTs	3.8
	445017	AI205493	Hs.176860	ESTs	3.8
	405867				3.8
10	422760	BE409561		gb:601299865F1 NIH_MGC_21 Homo sapiens c	3.8
	453863	X02544	Hs.572	orosomucoid 1	3.8
	457821	H47166	Hs.124322	ESTs, Weakly similar to A47582 B-cell gr	3.8
	457330	AB013818	Hs.247220	peroxisome biogenesis factor 10	3.8
	435600	AL047034	Hs.119747	ESTs	3.8
	456083	U46922	Hs.77252	fragile histidine triad gene	3.8
15	413341	H78472	Hs.191325	ESTs, Weakly similar to T18967 hypothe	3.8
	449057	AB037784	Hs.22941	KIAA1363 protein	3.8
	421855	F06504	Hs.27384	ESTs, Moderately similar to ALU4_HUMAN A	3.8
	414764	AW013887	Hs.72047	ESTs	3.8
	404391				3.7
20	433629	R13140	Hs.13359	ESTs	3.7
	424738	AI963740	Hs.46826	ESTs	3.7
	401315				3.7
	407706	AA191085	Hs.26612	ESTs, Moderately similar to S23650 retro	3.7
25	440530	AA688646	Hs.174187	ESTs	3.7
	433930	AA620338	Hs.273781	ESTs	3.7
	409662	AW452320	Hs.279726	ESTs	3.7
	437268	AI754847	Hs.227571	regulator of G-protein signalling 4	3.7
	445688	AI248205	Hs.153244	ESTs	3.7
	408593	R19566	Hs.197617	ESTs	3.7
30	417091	AA193283	Hs.291990	ESTs	3.7
	448556	AW885606	Hs.5064	ESTs	3.7
	423135	N67655	Hs.26411	ESTs	3.7
	400135				3.7
35	459150	BE155356		gb:PM1-HT0350-160300-009-d06 HT0350 Homo	3.7
	457221	AW383197	Hs.218260	ESTs	3.7
	451660	AI807927	Hs.249601	ESTs	3.7
	401600	BE247275	Hs.151787	U5 snRNP-specific protein, 116 kD	3.7
	446818	AI342668	Hs.279765	ESTs	3.7
40	447795	AW295151	Hs.163612	ESTs	3.7
	427562	R56424	Hs.26534	ESTs	3.6
	412258	AA376768	Hs.324841	hypothetical protein FLJ22622	3.6
	454339	AW381980		gb:QV4-HT0316-091199-028-d05 HT0316 Homo	3.6
	439274	AF086092	Hs.48372	ESTs	3.6
	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.6
45	422897	AA679784	Hs.4290	ESTs	3.6
	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	3.6
	421908	AW935200	Hs.285814	sprouty (Drosophila) homolog 4	3.6
	407978	AW385129	Hs.41717	phosphodiesterase 1A, calmodulin-depende	3.6
	426452	AW614271	Hs.121647	ESTs, Highly similar to AC006014 8 simil	3.6
50	400685				3.6
	417154	AI674701	Hs.21388	ESTs	3.6
	447178	Z42549	Hs.160893	ESTs	3.6
	423893	AL031709	Hs.134846	Human DNA sequence from clone 316G12 on	3.6
	449231	BE410360	Hs.298573	KIAA1720 protein	3.6
55	411607	AW853498		gb:RC1-CT0252-170200-025-h02 CT0252 Homo	3.6
	405977				3.6
	441470	BE503874	Hs.301986	ESTs	3.6
	423568	NM_005256	Hs.129818	growth arrest-specific 2	3.6
60	441235	AI884586	Hs.135570	Homo sapiens cDNA: FLJ21268 fs, clone C	3.6
	450236	AW162998	Hs.24684	KIAA1376 protein	3.6
	425364	AF052150	Hs.155959	Homo sapiens clone 24533 mRNA sequence	3.6
	426775	AA384564	Hs.108829	ESTs	3.6
	414831	M31158	Hs.77439	protein kinase, cAMP-dependent, regulato	3.6
65	416878	AW501916	Hs.117897	ESTs	3.6
	400878				3.6
	425153	AW023193	Hs.27046	ESTs	3.6
	432222	AI204995		gb:an03c03.x1 Stratagene schizo brain S1	3.5
	415047	F13142		gb:HSC3J031 normalized infant brain cDN	3.5
	401532				3.5
70	446495	D60923	Hs.153460	ESTs	3.5
	431325	AW026751	Hs.5794	ESTs, Weakly similar to 2109260A B cell	3.5
	445888	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	3.5
	455901	BE155527		gb:PM1-HT0350-190400-013-b08 HT0350 Homo	3.5
75	416421	AA134006	Hs.79306	eukaryotic translation initiation factor	3.5
	455697	BE067952		gb:CM0-BT0365-061299-122-g09 BT0365 Homo	3.5
	405678				3.5
	418207	C14585	Hs.34772	ESTs	3.5
	425383	D83407	Hs.156007	Down syndrome critical region gene 1-lik	3.5
80	417027	AA192306	Hs.23926	triadin	3.5
	408367	AK001178	Hs.44424	homolog of rat orphan transporter v7-3	3.5
	417702	R09935	Hs.191146	ESTs	3.5
	445687	W80382	Hs.149297	ESTs	3.5
	408776	AA057365	Hs.63356	ESTs, Weakly similar to 138022 hypothe	3.5

5	413164	BE068494		gb:MR1-BT0371-050500-009-a12 BT0371 Homo	3.5
	414593	BE386764		gb:601273249F1 NIH_MGC_20 Homo sapiens c	3.5
	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	3.5
	415621	A048602	Hs.55458	ESTs	3.5
	454437	A1248173	Hs.191460	hypothetical protein MGC12938	3.5
	446066	A1343931	Hs.149383	ESTs	3.5
	423374	AB037770	Hs.127656	KIAA1349 protein	3.5
	419347	C15944	Hs.90005	superiorcervical ganglia, neural specif	3.5
	418516	NM_006218	Hs.85701	phosphoinositide-3-kinase, catalytic, al	3.5
10	451776	W45679	Hs.169854	hypothetical protein SP192	3.5
	432305	M62402	Hs.274313	insulin-like growth factor binding prote	3.5
	456995	T89832	Hs.170278	ESTs	3.5
	403323				3.5
	425022	M95724	Hs.154207	centromere protein C 1	3.4
15	439394	AA149250	Hs.56105	ESTs	3.4
	433803	A1823593	Hs.27688	ESTs	3.4
	450715	A1264484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	3.4
	411474	AW848427		gb:IL3-CT0214-150200-075-H10 CT0214 Homo	3.4
	415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	3.4
20	423826	U20325	Hs.1707	cocaine- and amphetamine-regulated trans	3.4
	459495	BE544158		gb:601076707F1 NIH_MGC_12 Homo sapiens c	3.4
	427173	BE255017	Hs.97540	ESTs	3.4
	408112	AW451982	Hs.248613	ESTs	3.4
25	446092	N33522	Hs.145894	ESTs	3.4
	416868	A1656856	Hs.292597	ESTs	3.4
	458234	BE551408	Hs.127196	ESTs	3.4
	419555	AA244416		gb:nc07d11.s1 NCI_CGAP_Pr1 Homo sapiens	3.4
	414314	BE312991		gb:601150275F1 NIH_MGC_19 Homo sapiens c	3.4
	400425	AY004252	Hs.287385	PR domain containing 12	3.4
30	414366	BE549143		gb:601076456F1 NIH_MGC_12 Homo sapiens c	3.4
	434053	AW445136	Hs.134946	ESTs	3.4
	449997	A1683052	Hs.201577	KIAA1829 protein	3.4
	433461	A1636047	Hs.197623	ESTs	3.4
35	428006	AA418743	Hs.98306	KIAA1862 protein	3.4
	424695	U58331	Hs.151899	sarcoglycan, delta (3SkD dystrophin-asso	3.4
	443294	A1733625	Hs.133053	ESTs	3.4
	428212	AW444451	Hs.134812	ESTs	3.4
	457673	AA551569	Hs.272034	hypothetical protein PRO2822	3.4
40	446390	AA233393	Hs.14992	hypothetical protein FLJ11151	3.3
	428536	A143139	Hs.2288	visinin-like 1	3.3
	426597	AA382250	Hs.145601	ESTs	3.3
	410366	A1267589	Hs.302689	hypothetical protein	3.3
	458258	AW406546	Hs.127971	ESTs	3.3
	401738				3.3
45	409038	T97490	Hs.50002	small inducible cytokine subfamily A (Cy	3.3
	425785	T27017	Hs.159528	Homo sapiens clone 24400 mRNA sequence	3.3
	433328	AW298159	Hs.23644	ESTs, Weakly similar to S65824 reverse l	3.3
	414541	BE293116	Hs.76392	aldehyde dehydrogenase 1 family, member	3.3
50	434998	AW975157	Hs.26037	ESTs	3.3
	456359	A1967991	Hs.93574	homeo box D3	3.3
	426527	NM_001037	Hs.170238	sodium channel, voltage-gated, type I, b	3.3
	454267	AA437199	Hs.656	cell division cycle 25C	3.3
	400302	N48056	Hs.1915	fatate hydrolase (prostate-specific memb	3.3
55	434077	AF116659	Hs.321151	Homo sapiens PRO1412 mRNA, complete cds	3.3
	436602	A1793222	Hs.166817	ESTs	3.3
	449204	AB000099	Hs.23251	Down syndrome critical region gene 4	3.3
	417935	R53697	Hs.170044	ESTs	3.3
	423310	AA325225	Hs.124023	Homo sapiens cDNA FLJ14218 fs, clone NT	3.3
60	436524	T64297	Hs.5241	fatty acid binding protein 1, liver	3.3
	453406	A1192987	Hs.61784	hypothetical protein FLJ14451	3.3
	420164	AW339037	Hs.24908	ESTs	3.3
	447826	AW779317	Hs.258556	ESTs	3.3
	419875	AA853410	Hs.93567	proenkephalin	3.3
65	444612	AW138111	Hs.22902	ESTs	3.2
	418504	BE159718	Hs.85335	Homo sapiens mRNA; cDNA DKFZp564D1462 (f	3.2
	415242	R45986	Hs.295014	ESTs	3.2
	418188	AW139413	Hs.151880	ESTs	3.2
	430355	NM_006219	Hs.239818	phosphoinositide-3-kinase, catalytic, be	3.2
70	421640	AW966652		gb:EST378726 MAGE resequences, MAGI Homo	3.2
	432359	AA076049	Hs.274415	Homo sapiens cDNA FLJ10229 fs, clone HE	3.2
	408806	AW847814	Hs.289005	Homo sapiens cDNA: FLJ21532 fs, clone C	3.2
	400409	AF153341	Hs.283954	Homo sapiens winged helix/forkhead trans	3.2
	446015	T30968	Hs.13531	hypothetical protein FLJ10971	3.2
75	425495	AA358454	Hs.78026	ESTs, Weakly similar to similar to ankyr	3.2
	403092				3.2
	452971	A1873878	Hs.91789	ESTs	3.2
	454186	BE141030		gb:MR0-HT0067-201099-002-h11 HT0067 Homo	3.2
	401485				3.2
	401949				3.2
80	457452	AW972675		gb:EST384766 MAGE resequences, MAGL Homo	3.2
	454100	A1893231	Hs.126043	chromosome 21 open reading frame 51	3.2
	448440	AA173467	Hs.62402	p21/Cdc42/Rac1-activated kinase 1 (yeast	3.2
	421200	AA284811	Hs.264433	ESTs	3.2

	430142	NM_000437	Hs.234392	platelet-activating factor acetylhydrolase	3.2
	433197	AB040889	Hs.281022	KIAA1456 protein	3.2
	443509	AV645470		gb:AV645470 GLC Homo sapiens cDNA clone	3.2
5	440827	AJ733110	Hs.128128	ESTs	3.2
	432799	NM_016161	Hs.278960	alpha-1,4-N-acetylglucosaminyltransferase	3.2
	409257	AW370362		gb:RC1-BT0255-181099-012-d07 BT0255 Homo	3.2
	459235	BE246010	Hs.271458	Homo sapiens mRNA for FLJ00038 protein,	3.2
	416789	AA223439	Hs.79933	cyclin I	3.2
10	429809	AL162010	Hs.223603	Homo sapiens mRNA; cDNA DKFZp761D09121 (	3.2
	420156	AW449258	Hs.6187	ESTs	3.2
	455577	BE006341		gb:RC2-BN0127-240300-011-b05 BN0127 Homo	3.2
	400617	AF151064	Hs.35069	hypothetical protein	3.2
	437129	AL049327	Hs.302057	Homo sapiens mRNA; cDNA DKFZp564E016 (fr	3.2
	451820	AW058357	Hs.337353	ESTs	3.2
15	457535	AA609685	Hs.278672	membrane component, chromosome 11, surfa	3.1
	419956	AL137939	Hs.40096	ESTs	3.1
	456235	AA203637		gb:zz58b12.r1 Soares_fetal_liver_spleen_	3.1
	423930	AA332697	Hs.42721	ESTs	3.1
	403796				3.1
20	414085	AA114016	Hs.75746	aldehyde dehydrogenase 1 family, member	3.1
	445886	AJ793176	Hs.145596	ESTs	3.1
	414401	AJ760159	Hs.124833	ESTs	3.1
	441573	BE563966	Hs.6529	ESTs, Weakly similar to I78885 serine/th	3.1
	450725	R71389	Hs.175951	ESTs	3.1
25	458805	AJ282933	Hs.23294	hypothetical protein FLJ14393	3.1
	417888	AJ078534	Hs.122592	ESTs	3.1
	458391	AJ792628	Hs.133273	ESTs	3.1
	423346	AJ267677	Hs.127416	synaptotagmin 1	3.1
	454486	AW857077		gb:RC1-CT0302-140300-016-r04 CT0302 Homo	3.1
30	408341	AW182952	Hs.249957	ESTs	3.1
	410669	AW805749	Hs.318885	superoxide dismutase 2, mitochondrial	3.1
	404907				3.1
	434910	AJ333863	Hs.215474	ESTs, Moderately similar to alternative	3.1
	436990	AJ149729	Hs.120557	ESTs	3.1
35	441921	AJ733376	Hs.164478	hypothetical protein FLJ21939 similar to	3.1
	454673	AW812807		gb:RC3-ST0186-070100-016-c04 ST0186 Homo	3.1
	429470	AJ878901	Hs.203862	guanine nucleotide binding protein (G pr	3.1
	404345	AA730407	Hs.159156	protocadherin 11	3.1
40	408217	AJ433201	Hs.279860	tumor protein, translationally-controlled	3.1
	417313	AA195602		gb:z3209.r1 Soares_NhHMPu_S1 Homo sapi	3.1
	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	3.1
	411003	AA181018	Hs.13056	hypothetical protein FLJ13920	3.1
	425339	AA936330	Hs.198113	ESTs	3.1
45	426716	NM_006379	Hs.171921	sema domain, immunoglobulin domain (Ig),	3.1
	449078	AK001256	Hs.22975	KIAA1576 protein	3.1
	429608	U49250	Hs.210862	T-box, brain, 1	3.1
	442308	AA989402	Hs.111	fibroblast growth factor 9 (glia-activat	3.1
	428465	AW970976	Hs.293653	ESTs	3.1
50	411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	3.1
	447965	AW292577	Hs.94445	ESTs	3.1
	413918	AW015898	Hs.71245	ESTs	3.1
	419682	H13139	Hs.92282	paired-like homeodomain transcription fa	3.1
	425810	AJ923627	Hs.31903	ESTs	3.1
55	427865	AA416931	Hs.126065	ESTs	3.1
	429060	AW139155	Hs.194995	hypothetical protein DKFZp434O0320	3.1
	430708	U78308	Hs.278485	olfactory receptor, family 1, subfamily	3.1
	448084	AJ487800	Hs.271000	ESTs, Weakly similar to I38022 hypotheti	3.1
	454506	AW847346		gb:RC0-CT0205-240999-021-e01 CT0205 Homo	3.0
60	414629	AA345824	Hs.76688	carboxylesterase 1 (monocyte/macrophage	3.0
	422963	M79141	Hs.13234	ESTs	3.0
	417696	BE241624	Hs.82401	CD69 antigen (p60, early T-cell activati	3.0
	448175	BE296174	Hs.225160	hypothetical protein FLJ13102	3.0
	414686	BE409757	Hs.23189	ESTs, Moderately similar to TBB2_HUMAN T	3.0
65	458360	AJ027207	Hs.132253	ESTs	3.0
	451829	AW964081	Hs.247377	ESTs	3.0
	445179	AJ949743	Hs.224768	ESTs	3.0
	433090	AJ720050	Hs.145362	immortalization-upregulated protein	3.0
	432018	AA524447	Hs.152377	ESTs	3.0
70	407988	AA7760	Hs.285107	hypothetical protein FLJ13397	3.0
	405911				3.0
	418808	AJ821836	Hs.10359	ESTs	3.0
	431900	AW972048	Hs.192534	ESTs	3.0
	452893	H18017	Hs.22869	ESTs, Moderately similar to KIAA1395 pro	3.0
75	423952	AW877787	Hs.136102	KIAA0853 protein	3.0
	412000	AW576555	Hs.15780	ATP-binding cassette, sub-family A (ABC1	3.0
	405793				3.0
	410711	AB002316	Hs.65746	KIAA0318 protein	3.0
	411279	AW884776		gb:QV4-OT0067-010300-121-d01 OT0067 Homo	3.0
	423957	AW978309	Hs.136235	Homo sapiens cDNA FLJ13542 fs, clone PL	3.0
80	427071	AA397958	Hs.192719	ESTs	3.0
	434961	AW974956		gb:EST387061 MAGE resequences, MAGN Homo	3.0

TABLE 10B:

	Play:	Unique Eos probeset identifier number		
	CAT number:	Gene cluster number		
	Accession:	Genbank accession numbers		
5	Play	CAT Number		
	409257	1112994_1		
	409840	1156071_1		
	411052	1230374_1		
10	411279	1237516_1		
	411474	1247047_2		
	411607	1251251_1		
	411772	1257386_1		
	412112	1277883_1		
15	413164	1351422_1		
20				
25	413493	1373555_1		
	413510	1374377_1		
	413544	1375671_1		
	414220	1426940_1		
30	414314	1435028_1		
	414366	1438636_1		
	414456	1447655_1		
	414593	1464909_1		
	414630	1468083_1		
	415047	1517450_1		
35	417313	166644_1		
	417888	1706092_1		
	419555	185884_1		
	421249	200649_1		
40	421640	204833_1		
	421813	207654_1		
	422760	221034_1		
	425526	252776_1		
	430212	314437_1		
45	432222	343347_1		
	433389	36497_1		
	434961	396357_1		
	435752	41050_1		
	437483	43756_1		
50	440198	48824_2		
	443509	57199_1		
	446052	65988_1		
	446218	66686_1		
	447135	70963_1		
55	452346	912206_1		
	452502	919733_1		
	454065	998401_1		
	454186	1049791_1		
60	454339	1122972_1		
	454486	1215703_1		
	454506	1219857_1		
	454673	1228669_1		
	455040	1250028_1		
65	455225	1262318_1		
	455577	1333898_1		
	455617	1346117_1		
	455697	1351148_1		
	455801	1381569_1		
70	456235	168686_1		
	456407	184986_1		
	457452	339381_1		
	459150	919196_1		
75	TABLE 10C:			
	Play:	Unique number corresponding to an Eos probeset		
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.		
	Strand:	Indicates DNA strand from which exons were predicted.		
80	NL_position:	Indicates nucleotide positions of predicted exons.		
	Play	Ref	Strand	NL_position
	400661	8118474	Plus	84912-85187

5	400685	8118768	Minus	72969-73050,73713-73800
	400865	1945037	Minus	44482-45526
	400878	9864757	Plus	31493-32842
	401024	8117489	Plus	60551-60802
	401315	9212516	Minus	198960-199619
10	401485	7341723	Plus	68009-68209,68841-69077
	401521	7705251	Plus	9127-9234
	401532	7798785	Plus	124414-124950,125050-125418
	401738	2982169	Minus	41547-41757
	401780	7249190	Minus	28397-28617,28920-29045,29135-29296,29411-29567,29705-29787,30224-30573
15	401836	7534063	Plus	71981-72084
	401949	3492889	Plus	160728-161660
	402092	7249154	Minus	107533-108094
	402176	7543687	Minus	10-750
	402546	7637348	Plus	24673-25170
20	403092	8954241	Plus	174720-175016,175104-175408,175508-175813
	403180	7523976	Minus	63603-63759
	403323	8348082	Minus	120366-120845
	403796	8099896	Minus	75073-77664
	404391	3135305	Minus	26030-26173,27852-27997
25	404769	8099713	Minus	175801-176823
	404793	7232206	Minus	61087-61590
	404828	6580415	Minus	25291-27253
	404907	7331453	Minus	102880-103828
	404958	7407941	Minus	2731-4531
30	405071	7708797	Minus	11115-11552
	405130	8516045	Plus	150235-150449
	405138	8576241	Plus	90303-90516
	405354	2642452	Plus	52213-53089
	405377	5649375	Plus	216656-216848
35	405629	4508116	Minus	101678-101866
	405678	4079670	Plus	151821-152027
	405793	1405887	Minus	89197-89453
	405800	2791346	Plus	19271-19813
	405867	6758731	Minus	74553-75173
40	405911	6758795	Plus	101008-101643
	405977	8247789	Minus	135548-136177

TABLE 11A: ABOUT 533 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES  
Table 11A lists about 533 CNS-enriched genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 75th percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85th percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 2. The "average" CNS level was set to the 85th percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 85th percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

50	PKey:	Unique Eos probeset identifier number				
	ExAccn:	Exemplar Accession number, Genbank accession number				
	UnigeneID:	Unigene number				
	Unigene Title:	Unigene gene title				
	R1:	Ratio of 75th percentile normal central nervous system tissue to 85th percentile tumor				
55	R2:	Ratio of 85th percentile central nervous system tissue to 85th percentile normal body tissue				
	PKey	ExAccn	UnigeneID	Unigene Title	R1	R2
	417275	X63578	Hs.295449	parvalbumin	29.0	30.0
	430829	AW451999	Hs.194024	ESTs	25.7	6.2
	410657	AF063228	Hs.65248	dynein, cytoplasmic, intermediate polype	22.6	25.8
60	419954	D14720	Hs.93883	myelin protein zero (Charcot-Marie-Tooth	21.2	30.3
	416133	NM_001683	Hs.89512	ATPase, Ca++ transporting, plasma membra	15.5	16.8
	416018	AW138239	Hs.78977	proprotein convertase subtilisin/kexin 1	15.2	18.0
	417167	AW206437	Hs.4290	ESTs	14.8	17.7
	433940	H05129	Hs.7459	cyclic AMP-regulated phosphoprotein, 21	13.4	18.1
65	413324	V00571	Hs.75294	corticotropin releasing hormone	13.1	18.0
	439830	AA846666	Hs.151489	ESTs, Weakly similar to XE7_HUMAN PROTEI	12.6	16.5
	408068	AW148852	Hs.167398	ESTs	12.6	16.9
	429096	AB011106	Hs.196012	KIAA0534 protein	12.2	21.1
	412638	AA910199	Hs.203838	ESTs	12.2	16.0
70	442593	R39804	Hs.31961	ESTs	10.8	15.0
	448353	AI290919	Hs.153661	ESTs	10.4	13.2
	426365	AA376667	Hs.10283	RNA binding motif protein 88	10.0	5.9
	414937	R38698	Hs.12382	ESTs	10.0	10.8
	419643	F06066	Hs.91791	chromosome 11 open reading frame 25	9.5	10.9
75	412454	R55745	Hs.167330	ESTs	9.5	14.1
	439366	AF100143	Hs.6540	fibroblast growth factor 13	9.4	12.3
	441790	AW294909	Hs.132208	ESTs	9.2	3.2
	448117	H49129	Hs.172982	ESTs	9.1	12.8
	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypothesi	9.0	14.7
80	412453	R20205	Hs.167330	ESTs	9.0	13.7
	408920	AL120071	Hs.48998	fibronectin leucine rich transmembrane p	8.9	17.3
	409031	AA376836	Hs.76728	ESTs	8.7	8.6
	446544	AI831932	Hs.7047	ESTs, Weakly similar to Unknown [H.sapi	8.2	20.0
	439480	AL038511	Hs.125316	ESTs, Weakly similar to 533990 finger pr	8.2	8.3

	410200	AA082557	Hs.101915	Stargard disease 3 (autosomal dominant)	8.0	8.9
	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	7.9	9.6
	437073	AI885608	Hs.94122	ESTs	7.9	11.3
	408434	AW195317	Hs.107716	hypothetical protein FLJ22344	7.9	16.4
5	440209	H05049	Hs.22269	neurexin 3	7.8	34.3
	408119	W26213	Hs.101672	ESTs, Weakly similar to T00331 hypotheti	7.8	9.0
	429611	AI889077	Hs.211388	Homo sapiens BAC clone CTB-60N22 from 7q	7.7	5.0
	423440	R25234	Hs.143434	contactin 1	7.7	9.9
	445148	AI214510	Hs.146304	ESTs	7.6	9.1
10	418294	D86980	Hs.79170	KIAA0227 protein	7.6	7.6
	424087	N69333	Hs.143434	contactin 1	7.6	10.3
	437479	R61866	Hs.101277	ESTs	7.5	9.3
	430573	AA744550	Hs.136345	ESTs	7.1	2.8
	448958	AB020651	Hs.22653	KIAA0844 protein	7.1	10.4
15	419474	AW968619	Hs.155849	ESTs	7.1	3.0
	423605	AF047826	Hs.128687	cadherin 19, type 2	7.0	6.9
	433098	AW190593	Hs.151143	ESTs	7.0	9.2
	449511	AA436187	Hs.296261	guanine nucleotide binding protein (G pr	6.9	3.1
	428414	AL049980	Hs.184216	DKFZP564C152 protein	6.8	5.0
20	443155	R54485	Hs.23772	ESTs	6.8	3.5
	450561	R49674	Hs.25909	ESTs	6.8	8.1
	433068	NM_006456	Hs.288215	slalytransferase	6.8	2.0
	423589	AA328082	Hs.209569	ESTs	6.6	10.5
	415681	AI379882	Hs.72630	ESTs	6.5	9.0
25	413510	F13044		gb:HSC3HH101 normalized infant brain cDN	6.4	7.1
	427992	Y15014	Hs.181353	UDP-Gal4betaGlcNAc beta 1,3-galactosyltr	6.4	9.5
	450642	R39773	Hs.7130	copine IV	6.4	5.7
	428322	D86984	Hs.189243	KIAA0231 protein	6.4	8.2
	447482	AB033059	Hs.18705	KIAA1233 protein	6.4	2.3
30	446129	AW244073	Hs.145946	ESTs	6.3	8.3
	421913	AI934365	Hs.109439	osteoglycin (osteoinductive factor, mime	6.3	2.1
	434273	AA913143	Hs.26303	ESTs	6.2	10.3
	408480	AI350337	Hs.164568	fibroblast growth factor 7 (keratinocyte	6.2	3.5
	451301	AI769514	Hs.209890	EST	6.2	12.4
35	438356	AA805530	Hs.48527	ESTs	6.2	8.1
	426388	AW081394	Hs.97103	ESTs	6.2	8.6
	452502	AI904296		gb:PM-BT046-220199-286_1 BT046 Homo sapi	6.1	2.8
	408165	AL137573	Hs.43143	Homo sapiens mRNA; cDNA DKFZp564A2463 (I	6.1	6.3
	442979	AW440782	Hs.174743	ESTs	6.1	6.3
40	408713	NM_001248	Hs.47042	ectonucleoside triphosphate diphosphohyd	6.0	3.8
	430004	U27768	Hs.227571	regulator of G-protein signaling 4	5.9	21.4
	425087	R62424	Hs.126059	ESTs	5.9	8.1
	441695	T12411	Hs.183745	hypothetical protein FLJ13456	5.9	3.1
45	417175	R44558	Hs.94002	ESTs	5.8	12.5
	437483	AL390174		gb:Homo sapiens mRNA; cDNA DKFZp547J184	5.8	2.2
	436427	AI344378	Hs.143399	ESTs	5.8	13.8
	450382	AA397658	Hs.60257	Homo sapiens cDNA FLJ13598 fs, clone PL	5.7	4.4
	408478	NM_000806	Hs.45740	gamma-aminobutyric acid (GABA) A recepto	5.7	12.5
50	442676	AI733585	Hs.130897	ESTs	5.7	6.8
	446443	AV659082	Hs.134228	ESTs	5.7	6.4
	459080	AW192083	Hs.290855	ESTs	5.6	15.6
	431984	AL080239	Hs.272284	Human DNA sequence from clone GS1-256022	5.6	8.2
	428358	AL046991	Hs.10338	ESTs	5.6	6.2
55	417877	AI025829	Hs.86320	ESTs	5.4	4.9
	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	5.3	13.1
	408556	U49516	Hs.46362	5-hydroxytryptamine (serotonin) receptor	5.3	6.6
	431930	AB035301	Hs.272211	cadherin 7, type 2	5.2	6.0
	438285	AA782845	Hs.22790	ESTs	5.2	7.3
60	439901	N73685	Hs.124169	ESTs	5.2	2.7
	449222	AW293984	Hs.197621	ESTs	5.2	8.1
	408016	AW136827	Hs.256096	ESTs	5.1	2.5
	436953	AW959074	Hs.23648	Homo sapiens cDNA FLJ13097 fs, clone NT	5.1	3.0
	436773	AW078629	Hs.82110	PC4 and SFRS1 interacting protein 1	5.1	7.3
65	409263	AA069573	Hs.50319	ESTs	5.1	12.9
	453830	AA534296	Hs.20953	ESTs	5.1	3.4
	441535	AL135735	Hs.7885	phosphatidylinositol binding clathrin as	5.0	4.8
	416490	AF090116	Hs.79348	regulator of G-protein signaling 7	5.0	20.1
	417284	N62889	Hs.107242	Homo sapiens cDNA FLJ12965 fs, clone NT	5.0	3.9
70	448605	AL109678	Hs.21597	Homo sapiens mRNA full length insert cDN	5.0	6.1
	442240	AI791883	Hs.292719	ESTs	4.9	6.7
	427972	AA864870	Hs.181304	putative gene product	4.9	5.2
	416040	AW819158	Hs.289044	Homo sapiens cDNA FLJ12048 fs, clone HE	4.9	2.6
	444922	AI921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL	4.8	3.7
75	408936	AL138043	Hs.283549	ESTs	4.8	6.6
	414943	D80647	Hs.124193	ESTs	4.8	3.1
	429254	H10133	Hs.91846	hypothetical protein DKFZp761C121	4.8	2.3
	407906	AA369665	Hs.41185	Homo sapiens mRNA; cDNA DKFZp564O1262 (I	4.8	9.1
	416577	BE063207	Hs.79381	grancalcin	4.7	2.2
80	420480	AL137361	Hs.98173	hypothetical protein	4.7	2.8
	404793				4.6	2.2
	430895	U66581	Hs.248121	G protein-coupled receptor 22	4.6	7.4
	438571	AW020775	Hs.56022	ESTs	4.6	5.4
	444585	AW170015	Hs.65594	ESTs	4.6	6.0

5	414272	AI851603	Hs.46988	ESTs	4.5	2.2
	414699	AI815523	Hs.76930	synuclein, alpha (non A4 component of am	4.5	30.9
	423449	AI497900	Hs.33067	ESTs	4.5	20.8
	433521	T66087	Hs.112482	Homo sapiens unknown mRNA sequence	4.4	2.0
	429876	AB028977	Hs.225974	KIAA1054 protein	4.4	19.2
10	429726	AW628326	Hs.27151	ESTs	4.4	10.2
	449093	AB035356	Hs.22998	neurexin 1	4.4	9.4
	415716	N59294	Hs.179662	nucleosome assembly protein 1-like 1	4.4	15.1
	419656	AB002314	Hs.92025	KIAA0316 gene product	4.4	8.2
	425864	U56420	Hs.159903	olfactory receptor, family 5, subfamily	4.4	2.4
15	435078	AW518888	Hs.40937	ESTs	4.4	5.7
	432712	AB016247	Hs.288031	sterol-C5-desaturase (fungal ERG3, delta	4.3	5.9
	426867	AA460967	Hs.22668	ESTs	4.3	6.0
	412112	BE180342		gb:RC3-HT0622-130400-012-a07 HT0622 Homo	4.3	3.2
	410171	H07892	Hs.12431	ESTs	4.3	5.3
20	442339	BE299668	Hs.227591	ESTs, Weakly similar to 1901303A Lev zip	4.2	5.0
	421249	AA285362		gb:HTH277 H7C0L1 Homo sapiens cDNA S/T	4.2	3.5
	422528	AB011182	Hs.118087	KIAA0610 protein	4.2	3.9
	434460	AA478488	Hs.3852	KIAA0368 protein	4.1	8.3
	410362	H04811	Hs.93164	proprotein convertase subtilisin/kexin 1	4.1	7.0
25	449754	H00820	Hs.30977	ESTs, Weakly similar to B34087 hypothe	4.1	3.9
	408496	AI683802	Hs.136182	ESTs	4.1	4.7
	434101	AA625205	Hs.259599	KIAA1622 protein	4.1	6.3
	430212	AA469153	Hs.32042	gb:nc6704.s1 NC1_CGAP_Py1 Homo sapiens	4.0	2.5
	453165	S74727		aspartoacylase (aminoacylase 2, Canavan	4.0	7.4
30	456407	AW968614		gb:EST380690 MAGE resequences, MAGJ Homo	4.0	5.1
	441869	NM_003947	Hs.8004	huntingtin-associated protein interact	4.0	32.3
	429828	H09604	Hs.13268	ESTs	4.0	4.5
	410087	F12079	Hs.332579	ESTs	4.0	6.9
	419910	AA662913	Hs.190173	ESTs, Weakly similar to A46010 X-linked	4.0	2.6
35	441005	Z41305	Hs.303172	Homo sapiens mRNA: cDNA DKFZp547G133 (fr	3.9	21.7
	412677	AW029608	Hs.17384	ESTs	3.9	2.2
	453341	AI758912	Hs.296341	adenylyl cyclase-associated protein 2	3.9	7.2
	416854	H40164	Hs.80296	Purkinje cell protein 4	3.9	2.2
	414666	NM_004456	Hs.76828	glypican 5	3.8	6.2
40	418217	AI910847	Hs.13442	ESTs	3.8	3.2
	421855	F06504	Hs.27384	ESTs, Moderately similar to ALU4_HUMAN A	3.8	2.2
	414764	AW013887	Hs.72047	ESTs	3.8	10.7
	433829	R13140	Hs.13359	ESTs	3.7	2.7
	424738	AI963740	Hs.46826	ESTs	3.7	2.1
45	407706	AA191085	Hs.26612	ESTs, Moderately similar to S23650 retro	3.7	5.3
	437268	AI754847	Hs.227571	regulator of G-protein signaling 4	3.7	53.7
	423135	N67655	Hs.26411	ESTs	3.7	21.7
	446818	AI342668	Hs.279765	ESTs	3.7	2.5
	427562	R56424	Hs.26534	ESTs	3.6	3.6
50	439274	AF086092	Hs.48372	ESTs	3.6	34.5
	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.6	6.0
	422897	AA679784	Hs.4290	ESTs	3.6	5.1
	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	3.6	24.6
	417154	AI674701	Hs.21388	ESTs	3.6	5.8
55	447176	Z42549	Hs.160893	ESTs	3.6	6.4
	405977				3.6	3.9
	423568	NM_005256	Hs.129818	growth arrest-specific 2	3.6	2.5
	441235	AI884586	Hs.135570	Homo sapiens cDNA: FLJ21268 fls, clone C	3.6	5.4
	426775	AA384564	Hs.108829	ESTs	3.6	3.4
60	414831	M31158	Hs.77439	protein kinase, cAMP-dependent, regulato	3.6	2.8
	425153	AW023193	Hs.27046	ESTs	3.6	4.9
	446495	D60923	Hs.153460	ESTs	3.5	9.8
	445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	3.5	16.6
	416421	AA134006	Hs.79308	eukaryotic translation initiation factor	3.5	5.0
65	418207	C14685	Hs.34772	ESTs	3.5	16.0
	425383	D83407	Hs.156007	Down syndrome critical region gene 1-like	3.5	6.2
	417027	AA192306	Hs.23926	bradin	3.5	2.5
	408367	AK001178	Hs.44424	homolog of rat orphan transporter v7-3	3.5	5.3
	408778	AA057365	Hs.63356	ESTs, Weakly similar to I38022 hypothe	3.5	5.5
70	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	3.5	23.6
	419347	C15944	Hs.90005	superiorcervical ganglia, neural specif	3.5	42.3
	433803	AI823593	Hs.27688	ESTs	3.4	3.6
	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	3.4	4.1
	415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	3.4	9.8
75	423828	U20325	Hs.1707	cocaine- and amphetamine-regulated trans	3.4	4.7
	427173	BE255017	Hs.97540	ESTs	3.4	2.4
	446092	N33522	Hs.145894	ESTs	3.4	3.5
	416868	AI656856	Hs.292597	ESTs	3.4	4.5
	458234	BE561408	Hs.127196	ESTs	3.4	4.5
80	434053	AW445136	Hs.134946	ESTs	3.4	3.9
	428536	AI143139	Hs.2288	visinin-like 1	3.3	42.3
	410366	AI267589	Hs.302689	hypothetical protein	3.3	14.4
	425785	T27017	Hs.159528	Homo sapiens clone 24400 mRNA sequence	3.3	4.6
	434998	AW975157	Hs.26037	ESTs	3.3	4.7
	456359	AI967991	Hs.93574	homeo box D3	3.3	4.4
	426527	NM_001037	Hs.170238	sodium channel, voltage-gated, type I, b	3.3	5.2
	400302	N48056	Hs.1915	isolate hydrolase (prostate-specific memb	3.3	9.0

5	419875	AA853410	Hs.93557	proenkephalin	3.3	3.6
	444612	AW138111	Hs.22902	ESTs	3.3	3.0
	415242	R45986	Hs.295014	ESTs	3.2	2.2
	421640	AW966652		gb:EST378726 MAGE resequences, MAGI Homo	3.2	3.8
	408806	AW847814	Hs.269005	Homo sapiens cDNA: FLJ21532 fs, clone C	3.2	2.4
10	446015	T30968	Hs.13531	hypothetical protein FLJ10971	3.2	3.2
	425495	AA358454	Hs.76026	ESTs, Weakly similar to similar to ankyr	3.2	2.2
	403092			ESTs	3.2	2.9
	452971	AJ873878	Hs.91789	ESTs	3.2	4.5
	454100	AJ693231	Hs.126043	chromosome 21 open reading frame 51	3.2	2.7
15	448440	AA173467	Hs.62402	p21/Cdc42/Rac1-activated kinase 1 (yeast	3.2	2.8
	421200	AA284811	Hs.264433	ESTs	3.2	2.7
	440827	AJ733110	Hs.128128	ESTs	3.2	2.1
	429809	AL162010	Hs.223603	Homo sapiens mRNA: cDNA DKFZp761D09121 (	3.2	4.3
	420156	AW449258	Hs.6187	ESTs	3.2	19.0
20	457535	AA609685	Hs.278672	membrane component, chromosome 11, surfa	3.2	2.0
	419956	AL137939	Hs.40096	ESTs	3.1	8.7
	423930	AA332697	Hs.42721	ESTs	3.1	2.7
	417868	AJ078534	Hs.122592	ESTs	3.1	12.6
	423348	AJ267677	Hs.127416	synaplojanin 1	3.1	12.0
25	441921	AJ733376	Hs.164478	hypothetical protein FLJ21939 similar to	3.1	4.3
	429470	AJ878901	Hs.203862	guanine nucleotide binding protein (G pr	3.1	5.3
	408217	AJ433201	Hs.279860	tumor protein, translationally-controlled	3.1	7.1
	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	3.1	6.3
	449078	AK001256	Hs.22975	KIAA1576 protein	3.1	30.1
30	429608	U49250	Hs.210882	T-box, brain, 1	3.1	2.2
	442308	AA989402	Hs.111	fibroblast growth factor 9 (glyc-activat	3.1	3.0
	411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	3.1	10.9
	427865	AA416931	Hs.126065	ESTs	3.1	7.5
	430708	U78308	Hs.278485	olfactory receptor, family 1, subfamily	3.1	3.4
35	451829	AW964081	Hs.247377	ESTs	3.0	6.2
	405911			ESTs	3.0	2.4
	418808	AJ821836	Hs.10359	ESTs	3.0	6.2
	452893	H18017	Hs.22869	ESTs, Moderately similar to KIAA1395 pro	3.0	5.1
	423952	AW877787	Hs.136102	KIAA0853 protein	3.0	2.1
40	412000	AW576555	Hs.15780	ATP-binding cassette, sub-family A (ABC1	3.0	2.1
	405793			ESTs	3.0	2.7
	410711	AB002316	Hs.65746	KIAA0318 protein	3.0	14.3
	427071	AA397958	Hs.192719	ESTs	3.0	2.1
	453534	NM_014796	Hs.33187	KIAA0748 gene product	3.0	14.5
45	413903	AA496493	Hs.23136	ESTs	3.0	2.2
	426866	U02330	Hs.172816	neuregulin 1	3.0	11.3
	434945	AB033065	Hs.4280	KIAA1239 protein	3.0	3.5
	412639	AW961284	Hs.296235	ESTs	2.9	4.9
	453590	AF150278	Hs.33578	KIAA0820 protein	2.9	33.1
50	414502	AL133721	Hs.224580	ESTs	2.9	2.3
	434367	AB020700	Hs.3830	KIAA0893 protein	2.9	23.1
	425121	AJ797511	Hs.154679	synaptotagmin I	2.9	8.1
	412494	AL133900	Hs.792	ADP-ribosylation factor domain protein 1	2.9	20.8
	401213			ESTs	2.9	3.2
55	401028	AW673312	Hs.50848	hypothetical protein FLJ20331	2.9	3.4
	415191	AA190381	Hs.120810	ESTs	2.9	3.0
	449275	AW450848	Hs.205457	perforin	2.9	5.6
	419863	AW952691	Hs.93485	Homo sapiens mRNA: cDNA DKFZp761D191 (tr	2.9	35.0
	411421	BE272110	Hs.21177	ESTs	2.9	2.0
60	430865	AJ073424	Hs.5232	HSPC125 protein	2.9	11.4
	437486	AW952089	Hs.5636	RAB8A, member RAS oncogene family	2.9	2.2
	442357	AJ458588	Hs.135708	ESTs	2.9	8.0
	408274	R17315		gb:yg12g11.1 Soares infant brain 1N1B H	2.9	2.2
	444185	AW298350	Hs.66020	ESTs	2.8	5.0
65	420173	AA256151	Hs.22999	ESTs	2.8	5.1
	428358	AA932222	Hs.101915	Stargardt disease 3 (autosomal dominant)	2.8	7.0
	447252	R90916	Hs.12449	Homo sapiens transmembrane protein HTMP1	2.8	4.4
	440260	AJ972867	Hs.7130	copine IV	2.8	10.6
	417084	H08370	Hs.33067	ESTs	2.8	8.4
70	438257	AW474419	Hs.224794	ESTs	2.8	2.8
	441934	T23939	Hs.7344	ESTs	2.8	6.2
	447885	F11528	Hs.303172	Homo sapiens mRNA: cDNA DKFZp547G133 (tr	2.8	3.5
	423552	AF107028	Hs.129783	sodium channel, voltage-gated, type II,	2.8	3.4
	450940	AJ744943	Hs.143209	ESTs, Weakly similar to I38022 hypotheti	2.8	14.4
75	410011	AB020641	Hs.57856	PFTAIRE protein kinase 1	2.8	21.7
	445887	AJ263105	Hs.145597	ESTs	2.8	5.1
	425494	N55540	Hs.78026	ESTs, Weakly similar to similar to ankyr	2.8	2.4
	438202	AW169287	Hs.22588	ESTs	2.8	11.9
	436199	R38946	Hs.127951	hypothetical protein FLJ14503	2.8	6.0
80	434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	2.8	2.4
	415462	RS2692	Hs.12698	ESTs	2.8	3.4
	418070	NM_000844	Hs.83407	glutamate receptor, metabotropic 7	2.8	4.5
	432149	AW614326	Hs.157022	ESTs, Weakly similar to T34549 probable	2.8	9.5
	430271	D87466	Hs.240112	KIAA0276 protein	2.8	7.0
	437357	AL359559	Hs.331666	Homo sapiens mRNA: cDNA DKFZp762O2215 (I	2.7	2.5
	415838	R44338	Hs.7093	ESTs	2.7	3.6
	438675	AA813725	Hs.213568	ESTs	2.7	2.5



	419558	AW953679		gb:EST365749 MAGE resequences, MAGC Homo	2.7	3.1
	446318	AJ949389	Hs.18067	ESTs	2.7	4.1
	445183	AB007877	Hs.12385	KIAA0417 gene product	2.7	5.3
	457012	R41480	Hs.127630	ESTs	2.7	19.0
5	431988	AC002302	Hs.77202	protein kinase C, beta 1	2.7	7.2
	430223	NM_002514	Hs.235335	nephroblastoma overexpressed gene	2.7	2.8
	447932	AA837474	Hs.20021	vesicle-associated membrane protein 1 (s	2.7	3.8
	450214	BE439763	Hs.227571	regulator of G-protein signalling 4	2.7	6.9
	434731	AA648049	Hs.121518	ESTs	2.7	5.0
10	428839	AJ767756	Hs.82302	Homo sapiens cDNA FLJ14814 fs, clone NT	2.7	5.2
	407709	AA456135	Hs.23023	ESTs	2.7	2.5
	422420	U03398	Hs.1524	tumor necrosis factor (ligand) superfam	2.7	3.3
	443305	AK050693	Hs.133318	ESTs	2.7	5.9
	435648	H24347	Hs.27524	ESTs	2.7	15.0
15	418407	AL044818	Hs.84928	nuclear transcription factor Y, beta	2.7	2.7
	436771	AW975687	Hs.292979	ESTs	2.7	6.0
	428689	NM_014351	Hs.189810	sulfotransferase family 4A, member 1	2.7	4.8
	440503	NM_006539	Hs.7235	calcium channel, voltage-dependent, gamm	2.7	4.4
	441006	AW605267	Hs.7627	CGI-60 protein	2.7	3.1
20	410330	AW023630	Hs.46786	ESTs	2.6	29.5
	434398	AA121098	Hs.3838	serum-inducible kinase	2.6	2.6
	438831	BE263273	Hs.6439	synapsin II	2.6	7.8
	419066	Z98492	Hs.6975	PRO1073 protein	2.6	3.4
	412643	AW971239	Hs.293982	ESTs	2.6	2.2
25	430456	AA314998	Hs.241503	hypothetical protein	2.6	17.9
	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	2.6	2.9
	401421				2.6	2.0
	419530	X98330	Hs.90821	ryanodine receptor 2 (cardiac)	2.6	4.2
30	441817	AW969706	Hs.293332	ESTs	2.6	3.8
	439203	AA448930	Hs.8453	KIAA1587 protein	2.6	4.2
	426054	U12431	Hs.166109	ELAV (embryonic lethal, abnormal vision,	2.6	5.1
	444583	AW994403	Hs.100861	hypothetical protein FLJ14600	2.6	3.7
	417919	AJ928203	Hs.86379	ESTs	2.6	3.0
	434293	NM_004445	Hs.3796	EphB6	2.6	3.2
35	431716	D89053	Hs.268012	fatty-acid-Coenzyme A ligase, long-chain	2.6	6.4
	443037	AW500305	Hs.299166	syntaphin 7	2.6	2.2
	440736	D56919	Hs.265848	myomegalin	2.6	7.1
	404648				2.6	3.0
40	429995	AA463571		gb:zx72e09.r1 Soares_total_fetus_Nb2HF8_	2.6	3.5
	436508	AW504381	Hs.121121	ESTs, Weakly similar to S00755 pleckstri	2.6	3.9
	441190	H09073	Hs.25046	ESTs	2.6	3.1
	432278	AL137506	Hs.274256	hypothetical protein FLJ23563	2.6	2.9
	442731	AJ668167	Hs.131044	ESTs	2.6	4.1
	416836	D54745	Hs.80247	cholecystokinin	2.6	14.9
45	449071	NM_005872	Hs.22960	breast carcinoma amplified sequence 2	2.5	2.4
	436321	AA709133	Hs.180144	ESTs	2.5	2.8
	439693	AJ741816	Hs.125897	ESTs	2.5	3.6
	443212	AW269515	Hs.102500	hypothetical protein FLJ20481	2.5	2.8
50	423981	AL122104	Hs.136684	Homo sapiens mRNA; cDNA DKFZp434A1627 (f	2.5	3.8
	407868	NM_000950	Hs.40637	proline-rich Glu (G-carboxyglutamic acid	2.5	3.1
	443992	AW022228	Hs.322922	ESTs	2.5	27.9
	444124	R43097	Hs.6818	ESTs	2.5	5.3
	411379	AJ816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	2.5	38.0
	440474	AJ207936	Hs.7195	gamma-aminobutyric acid (GABA) A recepto	2.5	3.8
55	446277	AJ284218	Hs.159204	ESTs	2.5	2.2
	410111	AJ520206	Hs.189647	ESTs	2.5	3.5
	445162	AB011131	Hs.12376	piccolo (presynaptic cytomatrix protein)	2.5	4.8
	410718	AJ920783	Hs.191435	ESTs	2.5	4.5
60	417201	T60432	Hs.269084	ESTs, Moderately similar to AF097994 1 L	2.5	2.9
	420274	AW968000	Hs.143389	ESTs, Weakly similar to T14318 ubiquitin	2.5	2.8
	433498	AF084254	Hs.49785	VLCS-H1 protein	2.5	4.7
	437331	AL353933	Hs.21710	hypothetical protein DKFZp761G0313	2.5	3.3
	437358	AJ471969	Hs.182606	ESTs	2.5	3.0
65	441985	BE047625	Hs.169815	ESTs	2.5	3.6
	410025	BE220489	Hs.113592	ESTs, Moderately similar to I54374 gene	2.5	9.2
	414680	AA743331	Hs.272572	hemoglobin, alpha 2	2.5	3.6
	429956	AJ374651	Hs.22542	ESTs	2.5	23.9
	429028	AA443439	Hs.48797	ESTs	2.5	2.8
70	438109	AJ076621	Hs.71367	ESTs, Moderately similar to ALU7_HUMAN A	2.5	3.1
	439780	AL109688		gb:Homo sapiens mRNA full length insert	2.5	2.3
	440888	N45600	Hs.326880	ESTs	2.5	3.9
	445246	AJ217713	Hs.147588	ESTs	2.5	2.6
	440152	AB002376	Hs.7006	KIAA0378 protein	2.4	23.6
	432740	AF061034	Hs.278898	tumor necrosis factor alpha-inducible co	2.4	2.1
75	415122	D60708	Hs.22245	ESTs	2.4	3.9
	432298	AL118812	Hs.274293	Homo sapiens mRNA; cDNA DKFZp761G1111 (f	2.4	9.8
	437948	AA772920	Hs.303527	ESTs	2.4	9.8
	421360	AA297012	Hs.103839	erythrocyte membrane protein band 4.1-b	2.4	2.8
	427115	AW972853	Hs.112237	ESTs	2.4	2.2
80	452074	BE299035	Hs.27747	G protein-coupled receptor 37 (endotheli	2.4	10.0
	436639	D14838	Hs.111	fibroblast growth factor 9 (glia-activat	2.4	3.5
	434520	AA205273	Hs.177011	hypothetical protein	2.4	3.1
	411529	AA430348	Hs.317596	Homo sapiens cDNA FLJ12927 fs, clone NT	2.4	3.0

5	442272	AA988302	Hs.129172	ESTs	2.4	2.1
	422927	AW247388	Hs.301423	calcium binding protein 1 (calbrain)	2.4	2.7
	444647	H14718	Hs.11506	Human clone Z3589 mRNA sequence	2.4	2.8
	415827	H17462	Hs.23079	ESTs	2.4	15.0
	451397	AA017432	Hs.84529	ESTs, Weakly similar to Z202_HUMAN ZINC	2.4	3.9
	445200	AA084460	Hs.12409	somatostatin	2.4	3.7
	451062	AL110125	Hs.25910	Homo sapiens mRNA; cDNA DKFZp564C1416 (I)	2.4	2.4
	420328	Y19062	Hs.96870	stauferin (Drosophila, RNA-binding protein	2.4	4.3
10	432122	AA526514	Hs.118121	gbn16002.s1 NCJ_CGAP_Ov2 Homo sapiens	2.4	4.3
	444125	AI124882	Hs.242821	ESTs	2.4	3.5
	430538	AB032435	Hs.3052	differentiation-associated Na-dependent	2.4	10.8
	457519	X69438	Hs.12381	early growth response 4	2.4	2.4
	409371	R51736	Hs.115088	ESTs	2.4	2.1
15	456303	AA224872	Hs.6932	ESTs	2.4	3.2
	440105	AA694010	Hs.24980	Homo sapiens clone Z3809 mRNA sequence	2.4	23.4
	400979		Hs.14945	ESTs	2.4	4.1
	435286	R49685	Hs.27610	long fatty acyl-CoA synthetase 2 gene	2.4	6.5
	408950	AA707814	Hs.27610	retinoic acid- and interferon-inducible	2.4	18.5
20	452032	BE244005	Hs.297017	cytochrome P450 retinoid metabolizing pr	2.4	2.2
	432098	AF252297	Hs.297017	ESTs	2.4	2.7
	408974	AW015458	Hs.73734	glycoprotein V (platelet)	2.4	2.5
	412177	Z23091	Hs.191284	gbz227a08.r1 Soares fetal liver spleen	2.4	2.8
	413153	N94205	Hs.75893	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.4	2.5
25	417583	AA568782	Hs.194327	ankyrin 3, node of Ranvier (ankyrin G)	2.4	2.6
	452034	F12234	Hs.296341	ESTs	2.3	3.0
	424940	AA985308	Hs.130881	adenylyl cyclase-associated protein 2	2.3	6.3
	431706	AI816086	Hs.130489	B-cell CLL/lymphoma 11A (zinc finger pro	2.3	4.1
	419125	AA642452	Hs.21754	ATPase, aminophospholipid transporter-li	2.3	2.9
30	423641	AL137256	Hs.78589	ESTs, Weakly similar to TIM_HUMAN PROBAB	2.3	8.7
	436407	T88803	Hs.66180	Homo sapiens mRNA full length insert cDN	2.3	3.2
	446681	AL109781	Hs.115830	serine (or cysteine) proteinase inhibitor	2.3	5.2
	415669	NM_005025	Hs.12887	nucleosome assembly protein 1-like 2	2.3	54.7
	410765	AI694972	Hs.173034	heparan sulfate (glucosamine) 3-O-sulfot	2.3	9.1
35	422386	AF105374	Hs.173034	gbz105h05.r1 Soares_pregnant_uterus_Nbh	2.3	5.0
	414828	AA156651	Hs.173034	actin-related protein 3-beta	2.3	2.4
	445556	AI910241	Hs.173034	amphiphysin (Stiff-Mann syndrome with br	2.3	8.5
	426968	U07616	Hs.335429	RIKEN cDNA 8130422N19 gene	2.3	26.3
	444562	AA186715	Hs.128382	Homo sapiens mRNA; cDNA DKFZp7611224 (I	2.3	2.5
40	423420	AI571364	Hs.125304	ESTs	2.3	7.6
	439450	R51613	Hs.22265	pyruvate dehydrogenase phosphatase	2.3	26.3
	427127	AW802282	Hs.157299	ESTs	2.3	2.2
	447179	AW015633	Hs.288735	Homo sapiens cDNA FLJ13522 fs, clone PL	2.3	3.8
	414711	AI310440	Hs.75893	gbz1n71b05.x1 NCJ_CGAP_Kid11 Homo sapien	2.3	2.3
45	433449	AW772282	Hs.78976	ankyrin 3, node of Ranvier (ankyrin G)	2.3	3.8
	414320	U13616	Hs.99163	steroid sulfatase (microsomal), arylsulf	2.3	2.5
	416778	M16505	Hs.334409	ESTs	2.3	7.8
	425130	AA448208	Hs.334409	metallothionein 1G	2.3	4.1
	456664	AW963354	Hs.37282	ESTs	2.3	2.5
50	438283	AI458931	Hs.18949	ESTs, Weakly similar to CA2B_HUMAN COLLA	2.3	4.2
	417455	AW007066	Hs.195387	gb:CMO-NN0005-100300-279-c02 NN0005 Homo	2.3	3.0
	412100	AW892731	Hs.268806	ESTs	2.3	3.7
	448981	AI968719	Hs.45140	hypothetical protein FLJ14084	2.3	3.2
	416101	R24854	Hs.78748	KIAA0237 gene product	2.3	6.5
55	439731	AI953135	Hs.151017	estrogen-related receptor gamma	2.3	17.8
	415734	NM_014747	Hs.284186	forkhead box C1	2.3	40.1
	424596	AB020639	Hs.20935	hypothetical protein DKFZp7610221	2.3	2.9
	420230	AL034344	Hs.33067	ESTs	2.3	2.4
	451559	AL119980	Hs.33067	gb:RCO-HN0006-160300-011-e06 HN0006 Homo	2.3	5.7
60	404835		Hs.43670	kinesin family member 3A	2.3	2.1
	456765	AI497900	Hs.71992	heat shock protein (hsp110 family)	2.3	4.1
	455517	AW984068	Hs.2540	cholinergic receptor, nicotinic, alpha p	2.3	2.4
65	408206	AF041853	Hs.13298	ESTs	2.2	18.5
	411770	NM_014278	Hs.77910	3-hydroxy-3-methylglutaryl-Coenzyme A sy	2.2	3.9
	430105	X70297	Hs.153967	ESTs	2.2	2.6
	458694	F12832	Hs.200879	ESTs	2.2	4.9
	415091	AL044872	Hs.7589	ESTs, Weakly similar to A46010 X-linked	2.2	4.4
	439642	W81441	Hs.21659	ESTs	2.2	2.4
	450138	AW152104	Hs.94943	ESTs	2.2	4.9
70	454222	BE144344	Hs.283709	lipopolysaccharide specific response-7 p	2.2	3.7
	405326		Hs.144479	ESTs	2.2	2.7
	431342	AW971018	Hs.65379	ESTs	2.2	5.2
	453101	AW952776	Hs.166161	dynamitin 1	2.2	3.3
	408897	N50204	Hs.71592	Homo sapiens cDNA: FLJ21893 fs, clone H	2.2	2.8
75	451398	AI793124	Hs.12246	melan	2.2	4.6
	438208	AL041224	Hs.146312	Homo sapiens clone 24820 mRNA sequence	2.2	10.4
	408449	NM_004408	Hs.151449	KIAA0535 gene product	2.2	6.1
	414130	AI670831	Hs.106289	ESTs	2.2	3.1
	445016	U79716	Hs.131703	ESTs	2.2	3.9
80	424375	AF070547	Hs.75893	ankyrin 3, node of Ranvier (ankyrin G)	2.2	2.3
	424645	NM_014682			2.2	11.7
	409729	D51315			2.2	4.9
	432809	AA565509			2.2	19.9
	422890	Z43784			2.2	10.4

5	428532	AF157326	Hs.184786	TBP-interacting protein	2.2	6.5
	413074	AI871368	Hs.8417	hypothetical protein DKFZp761M0423	2.2	3.4
	414442	AA156238	Hs.32501	ESTs	2.2	3.2
	452768	AW069459	Hs.61539	ESTs	2.2	2.0
	450440	AB024334	Hs.25001	tyrosine 3-monooxygenase/tryptophan 5-mo	2.2	3.2
10	426281	AK000987	Hs.169111	oxidation resistance 1	2.2	2.3
	428411	AW291464	Hs.10338	ESTs	2.2	2.3
	413787	AJ352568	Hs.75544	tyrosine 3-monooxygenase/tryptophan 5-mo	2.2	3.1
	451734	NM_006176	Hs.26944	neurogranin (protein kinase C substrate,	2.2	8.5
	439108	AW163034	Hs.6457	synaptogyrin 3	2.2	7.9
15	405385				2.2	2.4
	447285	AI371849	Hs.200696	ATPase, Class VI, type 11C	2.2	2.2
	452667	T87219	Hs.13219	ESTs	2.2	3.1
	422234	AF119818	Hs.113287	discs, large (Drosophila) homolog-associ	2.1	8.3
	410339	AI916499	Hs.298258	ESTs	2.1	3.2
20	413231	D87461	Hs.75244	BCL2-like 2	2.1	4.5
	447104	R19085	Hs.210706	Homo sapiens cDNA FLJ13182 fts, clone NT	2.1	2.2
	451952	AL120173	Hs.301663	ESTs	2.1	36.5
	415841	Z45637	Hs.7093	ESTs	2.1	2.4
	441086	AI928489	Hs.213490	ESTs, Weakly similar to N33_HUMAN N33 PR	2.1	2.2
25	450407	NM_000810	Hs.24969	gamma-aminobutyric acid (GABA) A recepto	2.1	6.6
	427627	R87582	Hs.179915	guanine nucleotide binding protein (G pr	2.1	5.3
	449712	R56545	Hs.6100	ESTs	2.1	4.5
	409660	AW452065	Hs.258905	ESTs	2.1	2.1
	430434	AL049548	Hs.241420	Homo sapiens mRNA for KIAA1756 protein,	2.1	5.4
30	434138	AA625804		gb:zu86h01.s1 Soares_testis_NHT Homo sap	2.1	3.0
	448610	NM_006157	Hs.21602	nel (chicken)-like 1	2.1	4.8
	418948	AI217097		gb:qd43h07.x1 Soares_fetal_heart_NbHH19W	2.1	2.9
	414876	AW960925	Hs.924	crystallin, mu	2.1	3.4
	440426	AI159600	Hs.7181	Homo sapiens cDNA FLJ13563 fts, clone PL	2.1	3.7
35	451249	AA018227	Hs.27280	ESTs	2.1	4.1
	451475	T19093	Hs.26450	KIAA0725 protein	2.1	2.1
	448743	AB032962	Hs.21895	KIAA1136 protein	2.1	29.7
	430814	U89336	Hs.247993	NGS protein	2.1	2.7
	426990	AL044315	Hs.173094	Homo sapiens mRNA for KIAA1750 protein,	2.1	2.3
40	426642	AW068223	Hs.171581	ubiquitin C-terminal hydrolase UCH37	2.1	4.5
	427335	AA448542	Hs.251677	G antigen 7B	2.1	2.2
	459089	F13036	Hs.27373	Homo sapiens mRNA; cDNA DKFZp564O1763 (f	2.1	2.3
	435832	AA425688	Hs.41841	Bruno (Drosophila) -like 4, RNA binding	2.1	5.9
	446383	T05816	Hs.92511	ESTs	2.1	2.9
45	412768	AW996044	Hs.26239	Human DNA sequence from clone RP11-43882	2.1	2.1
	453976	BE463830	Hs.163714	ESTs	2.1	4.2
	415111	R39039	Hs.328455	EST	2.1	3.3
	452238	F01811	Hs.187931	ESTs	2.1	4.9
	445279	R41900	Hs.22245	ESTs	2.1	9.8
50	448799	AI937094	Hs.179080	ESTs	2.1	3.1
	418338	NM_002522	Hs.84154	neuronal pentraxin I	2.1	8.3
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	2.1	5.4
	443537	D13305	Hs.203	cholecystokinin B receptor	2.1	4.1
	454066	X00356	Hs.37058	calcionin/calcionin-related polypeptid	2.1	6.4
55	429954	AI918130	Hs.21374	ESTs	2.1	7.2
	415292	H29016	Hs.200576	ESTs	2.1	3.9
	423563	R34734	Hs.75209	protein kinase (cAMP-dependent, catalyti	2.1	3.1
	424906	AI566086	Hs.153716	Homo sapiens mRNA for Hmob33 protein, 3'	2.1	4.7
	459309	AA040620	Hs.5672	hypothetical protein AF140225	2.1	2.2
60	493340	AB032436	Hs.6535	brain-specific Na-dependent inorganic ph	2.1	4.7
	402598	BE314624	Hs.3128	polymerase (RNA) II (DNA directed) polyp	2.1	5.4
	435406	F26698	Hs.4884	calcium/calmodulin-dependent protein kin	2.1	6.6
	448792	RA2550	Hs.12826	ESTs	2.1	4.1
	449500	AW956345	Hs.12926	ESTs	2.1	2.4
65	441134	W29092	Hs.7678	cellular retinoic acid-binding protein 1	2.1	5.8
	433361	AW469373	Hs.300141	ribosomal protein L39	2.1	2.7
	452946	X95425	Hs.31092	EphA5	2.1	5.0
	426187	AF039023	Hs.167496	RAN binding protein 5	2.0	2.2
	453666	AW015681	Hs.135229	ESTs, Weakly similar to A2BP_HUMAN ATAX0	2.0	3.1
70	424632	AB014523	Hs.151406	KIAA0623 gene product	2.0	3.5
	448589	AF017090	Hs.21554	KIAA1107 protein	2.0	4.1
	430416	AC005531	Hs.57806	Homo sapiens PAC clone RP4-701016 from 7	2.0	2.3
	445627	AW818475	Hs.7383	ESTs	2.0	2.1
	417092	H97508	Hs.181165	eukaryotic translation elongation factor	2.0	2.5
75	453653	AW505554	Hs.144559	ESTs	2.0	4.7
	435850	AF250847	Hs.283514	mitochondrial ceramidase	2.0	3.7
	435088	AW975243	Hs.122596	ESTs	2.0	2.1
	423191	D61506	Hs.8417	hypothetical protein DKFZp761M0423	2.0	2.1
	411562	AL050201	Hs.70769	hypothetical protein DKFZp568E1923	2.0	2.8
80	431645	AF078849	Hs.266483	dynein light chain-A	2.0	2.5
	429834	AI929645	Hs.225936	synapsin I	2.0	3.6
	439607	BE540665	Hs.159460	ESTs	2.0	17.5
	408033	AW138045	Hs.242256	ESTs	2.0	4.0
	430317	AB020645	Hs.239189	glutaminase	2.0	2.7
	419631	AW188117	Hs.303154	popeye protein 3	2.0	2.6
	432660	AI288430	Hs.64004	ESTs	2.0	2.3
	454048	H05826	Hs.6921	ESTs	2.0	15.9

5	426917	AA913814	Hs.172854	OKFZP586B0923 protein	2.0	3.1
	423246	AL119114	Hs.77196	spectrin, alpha, non-erythrocytic 1 (alp	2.0	2.9
	415989	AI267700	Hs.317584	ESTs	2.0	4.8
	420276	AA290308	Hs.190561	ESTs, Highly similar to SORL_HUMAN SORT1	2.0	5.1
	424983	AI742434	Hs.169911	ESTs	2.0	15.9
	446296	AA985662	Hs.63131	Homo sapiens cDNA FLJ13155 fts, clone NT	2.0	2.7
	450006	AI241555	Hs.60171	ESTs	2.0	3.5

10	TABLE 11B:	
	Pkey:	Unique Eos probeset identifier number
	CAT number:	Gene cluster number
	Accession:	Genbank accession numbers

15	Pkey	CAT Number	Accession
	408274	104999_1	R17315 Z43964 AA053547
	412100	1277224_1	AW892731 H08502 Z45826
	412112	1277883_1	BE180342 BE180347 AW901900 BE180222 BE180218 BE180226 BE180413 BE180416 AW901899 BE180228 AW901897 BE180224 AW901898 BE180223 BE180219 BE180346 BE180343 BE180418 BE180225 BE180221 BE180341 AW901894 BE180217 BE180227 AW901891 BE180345 AW893614 AW893615 H85799 H83501 BE180220
20	413153	1350849_1	N94205 BE067565 BE067556
	413510	1374377_1	F13044 T77009 BE145525 BE145493
	414828	149563_1	AA156651 AA156622 R14472
	418948	180808_1	AI217097 AW886090 W38035 W38792 AA232835 AW935043
25	419558	185904_1	AW953678 AW953680 AA244436 H82527 AA381046 AA244483 H82526
	421249	200649_1	AA285362 AW752386 AW847156 AA285373 AW879575 AW879558
	421640	204833_1	AW966652 AW966653 AA294989 AA385977
	429995	311738_1	AA463571 AI277645 AL118763
30	430212	314437_1	AA469153 AI718503 AA469225
	432122	341756_1	AA526514 AW973343 AA554293
	433449	366532_1	AW772282 AA592974
	434138	380572_1	AA625804 AW418787 AW074833 AI675642 AI393368
35	437483	43756_1	AL390174 AW898817
	439780	47673_1	AL109688 R23665 R26578
	452502	919733_1	AI904296 BE007223 R30687
	455517	1321782_1	AW984068 AW984072 AW984077
	456407	184986_1	AW968614 AA243209 AA281411

40	TABLE 11C:	
	Pkey:	Unique number corresponding to an Eos probeset
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
	Strand:	Indicates DNA strand from which exons were predicted.
	NI_position:	Indicates nucleotide positions of predicted exons.

45	Pkey	Ref	Strand	NI_position
	400979	8072554	Plus	160842-161028
	401213	9858408	Plus	98243-98380,98489-98619
	401421	7452889	Minus	142291-142461
50	403092	8954241	Plus	174720-175016,175104-175406,175508-175813
	404648	9796894	Minus	115334-116020
	404793	7232206	Minus	61087-61590
	404835	6970743	Plus	85462-85684,88139-88287,90338-91018,94827-94990
55	405326	4375975	Plus	10633-10709,30805-30893,38078-38253,55112-55327,57718-57818,66696-66841
	405385	6552772	Plus	48332-48454
	405793	1405887	Minus	89197-89453
	405911	6758795	Plus	101008-101643
	405977	8247789	Minus	135548-136177

60 TABLE 12A: ABOUT 678 GENES UP-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL CENTRAL NERVOUS SYSTEM

Table 12A lists about 678 genes up-regulated in lower grade glioblastoma (LGG) compared to normal central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" LGG to "average" CNS tissues was greater than or equal to 2.5. The "average" LGG level was set to the 85<sup>th</sup> percentile amongst various LGG tumors. The "average" normal CNS tissue level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

65	Pkey:	Unique Eos probeset identifier number
	ExAccn:	Exemplar Accession number, Genbank accession number
	UnigeneID:	Unigene number
	Unigene Title:	Unigene gene title
70	R1:	Ratio of LOWER GRADE GLIOBLASTOMA to normal CNS

75	Pkey	ExAccn	UnigeneID	Unigene Title	R1
	412420	AL035668	Hs.73853	bone morphogenetic protein 2	20.3
	424800	AL035588	Hs.153203	MyoD family inhibitor	19.5
	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	18.5
80	402604			Target Exon	16.9
	444190	AI878918	Hs.10526	cysteine and glycine-rich protein 2	15.0
	409638	AW450420	Hs.21335	ESTs	14.0
	443731	AI083928	Hs.145418	ESTs	14.0
	456759	BE259150	Hs.127792	delta (Drosophila)-like 3	13.6
	447342	AI199268	Hs.19322	Homo sapiens, Similar to RUKEN cDNA 2010	12.2
	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	10.3
	427019	AA001732	Hs.173233	hypothetical protein FLJ10970	9.5

	425187	AW014486	Hs.22509	ESTs	9.0
	440210	AW674562	Hs.125296	ESTs	8.8
	448769	N66037	Hs.38173	ESTs	8.4
5	437034	AA742643		gb:ny91c01.s1 NCI_CGAP_GCB1 Homo sapiens	8.2
	449539	W80363	Hs.58446	ESTs	8.1
	417061	AJ875944	Hs.188691	Homo sapiens cDNA FLJ12033 fs, clone HE	8.0
	435020	AW505076	Hs.301855	DiGeorge syndrome critical region gene 8	7.8
	414217	AL309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	7.7
10	449300	AI556959	Hs.346514	ESTs	7.6
	449969	AW295142	Hs.180187	Homo sapiens cDNA FLJ14337 fs, clone PL	7.5
	452372	A885742	Hs.228474	ESTs	7.2
	410102	AW248508	Hs.279727	ESTs; homologue of PEM-3 [Ciona savignyi	7.2
	417308	H60720	Hs.81892	KIAA0101 gene product	7.2
15	447004	AW296968	Hs.157539	ESTs	7.1
	418113	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	7.1
	424635	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fs, clone PL	7.1
	406478			Target Exon	7.1
20	428728	NM_016625	Hs.191381	hypothetical protein	6.9
	414761	AI077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	6.9
	428037	N47474	Hs.89230	potassium intermediate/small conductance	6.7
	423343	AA324643	Hs.246106	ESTs	6.7
	418097	R45137	Hs.21868	ESTs	6.6
25	431553	X78075	Hs.2799	cartilage linking protein 1	6.6
	412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	6.4
	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kD)	6.4
	419169	AW851980	Hs.262346	ESTs, Weakly similar to S72482 hypothe	6.4
	431117	AF003522	Hs.250500	delta (Drosophila)-like 1	6.4
	445908	R13580	Hs.13436	Homo sapiens clone 24425 mRNA sequence	6.3
30	402855			NM_001839; Homo sapiens calponin 3, acid	6.2
	424009	F11690		gb:HSC30D041 normalized infant brain cDN	6.2
	400419	AF084545		Target	6.2
	446584	U53445	Hs.15432	downregulated in ovarian cancer 1	6.0
	414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	6.0
35	426140	AF131798	Hs.343768	Homo sapiens clone 25119 mRNA sequence	5.9
	427144	X95097	Hs.2126	vasoactive intestinal peptide receptor 2	5.9
	416658	U03272	Hs.79432	fibrillin 2 (congenital contractural ara	5.8
	405238			Target Exon	5.7
40	421977	W94197	Hs.110165	ribosomal protein L26 homolog	5.7
	405348			C7001664:gi12698081 dbj BAB21849.1  (AB	5.6
	428795	R45503	Hs.97469	ESTs, Highly similar to A39769 N-acetyl	5.4
	422672	X12784	Hs.119129	collagen, type IV, alpha 1	5.3
	403349	NM_001406		ephrin-B3	5.3
	453941	U39817	Hs.36820	Bloom syndrome	5.2
45	429139	F09092	Hs.66087	ESTs	5.2
	454860	AW835767		gb:QV4-LT0016-240200-110-b08 LT0016 Homo	5.2
	452279	AA286844	Hs.61260	hypothetical protein FLJ13164	5.1
	418030	BE207573	Hs.83321	neuromedin B	5.1
	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	5.1
50	450639	AI703186	Hs.277174	ESTs	5.1
	412811	H06382		ESTs	5.1
	442832	AW206560	Hs.253569	ESTs	5.1
	436608	AA628980		down syndrome critical region protein DS	5.1
	408161	AW952912	Hs.300383	hypothetical protein MGC3032	5.1
55	443744	AI084326	Hs.271548	ESTs, Weakly similar to I78885 serine/th	5.1
	447497	AW167254	Hs.205722	ESTs	5.0
	450811	AI739486	Hs.245497	ESTs	5.0
	433244	AB040943	Hs.271285	KIAA1510 protein	4.9
60	438458	AW975186		gb:EST387294 MAGE resequences, MAGN Homo	4.9
	438456	AA913381	Hs.20594	ESTs	4.9
	411048	AK001742	Hs.67991	hypothetical protein DKFZp434G0522	4.9
	456304	AI820973		gb:nc21c02.y5 NCI_CGAP_Pr1 Homo sapiens	4.9
	442547	AA306997	Hs.217484	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.9
	419991	AJ000098	Hs.94210	eyes absent (Drosophila) homolog 1	4.8
65	402274			C19000498:gi14567179 gb AA023507.1 AC00	4.8
	420092	AA814043	Hs.88045	ESTs	4.8
	436282	R91913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	4.8
	430809	AI791150	Hs.262009	ESTs, Moderately similar to I38022 hypot	4.8
	455104	BE064863		gb:RC1-8T0313-110300-015-r06 BT0313 Homo	4.8
70	403961			Target Exon	4.8
	424954	NM_000546	Hs.1846	tumor protein p53 (Li-Fraumeni syndrome)	4.8
	414825	X06370	Hs.77432	epidermal growth factor receptor (avian	4.8
	447891	R41754	Hs.6496	ESTs	4.7
	423529	T87318	Hs.120411	ESTs	4.7
75	422737	M26939	Hs.119571	collagen, type III, alpha 1 (Ehlers-Dan	4.7
	428722	U76456	Hs.190787	tissue inhibitor of metalloproteinase 4	4.6
	437698	R61837	Hs.7990	ESTs, Moderately similar to I84505 catcl	4.6
	403481			Target Exon	4.6
	426075	AW513691	Hs.270149	ESTs, Weakly similar to 2109260A B cell	4.6
80	422170	AI791949	Hs.112432	anti-Müllerian hormone	4.6
	418379	N38857	Hs.203933	ESTs	4.6
	406481			Target Exon	4.5
	456052	BE311901	Hs.28935	gb:501142614F1 NIH_MGC_14 Homo sapiens c	4.5
	423178	AJ033140	Hs.124983	Homo sapiens mRNA; cDNA DKFZp564C142 (tr	4.5

5	411642	NM_014932	Hs.71132	neuroigin 1	4.5
	428282	N34905	Hs.44653	Homo sapiens cDNA: FLJ22669 fs, clone H	4.5
	432625	AI243596	Hs.94830	ESTs, Moderately similar to T03094 A-kin	4.5
	452994	AW962597	Hs.31305	KIAA1547 protein	4.5
	449961	AW265634	Hs.133100	ESTs	4.4
10	401454			NM_014226-Homo sapiens renal tumor anti	4.4
	406395			Target Exon	4.4
	432281	AK001239	Hs.274263	hypothetical protein FLJ10377	4.4
	453792	AL134539	Hs.254129	KIAA1678	4.4
	415131	D61119		gb:HUM158C118 Clontech human fetal brain	4.4
15	437695	AA769202	Hs.192142	ESTs	4.4
	422081	AW136820	Hs.196011	ESTs	4.3
	437748	AF234882	Hs.5814	suppression of tumorigenicity 7	4.3
	433323	AA805132	Hs.159142	ESTs	4.3
	420352	BE258835		gb:601117374F1 NIH_MGC_16 Homo sapiens c	4.3
20	444218	AF070641	Hs.10684	Homo sapiens clone 24421 mRNA sequence	4.3
	441035	AI694309	Hs.126458	ESTs	4.3
	443836	BE221613	Hs.140553	ESTs	4.3
	425292	NM_005824	Hs.155545	37 kDa leucine-rich repeat (LRR) protein	4.3
	450166	AA429504		ESTs	4.2
25	429149	AW193360	Hs.197962	ESTs, Weakly similar to I38022 hypotheti	4.2
	422798	R92347	Hs.34574	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.2
	451254	AI571016	Hs.172967	ESTs	4.2
	409189	AA125984		gb:zn27h06.r1 Stratagene neuroepithelium	4.2
	445118	AI208762	Hs.345572	ESTs	4.2
30	444326	AI939357	Hs.270710	ESTs	4.2
	450660	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fs, clone MA	4.2
	404120			C50005377:gil3298595[gb]AA1376.11 (AF0	4.1
	436899	AA764852	Hs.291567	ESTs	4.1
	407624	AW157431	Hs.248941	ESTs	4.1
35	453361	AA035197	Hs.107375	ESTs	4.1
	447439	AA313565	Hs.145020	ESTs, Weakly similar to KIAA1205 protein	4.1
	438372	AI140189	Hs.123191	ESTs	4.1
	438624	AA889055	Hs.123468	ESTs	4.1
	422493	AW474183	Hs.250173	hypothetical protein FLJ13158	4.1
40	406872	AI760903		gb:wi09h08.x1 NCI_CGAP_CLL1 Homo sapiens	4.1
	425295	AA431368	Hs.37251	ESTs	4.1
	425849	AJ000512	Hs.296323	serum/glucocorticoid regulated kinase	4.0
	434206	AW136973	Hs.180479	ESTs, Weakly similar to S69890 mitogen i	4.0
	420602	AF060877	Hs.99235	regulator of G-protein signalling 20	4.0
45	400645			Target Exon	4.0
	456306	AA225313	Hs.222886	ESTs, Weakly similar to TRHY_HUMAN TRICH	4.0
	419326	W94915	Hs.42419	ESTs	4.0
	414948	C15240	Hs.182155	ESTs	4.0
	423198	M81933	Hs.1634	cell division cycle 25A	4.0
50	411537	BE073250		gb:MR0-BT0551-060300-102-c05 BT0551 Homo	3.9
	421637	AF035290	Hs.106300	Homo sapiens clone 23556 mRNA sequence	3.9
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFp434N079 (fr	3.9
	429433	AA452899	Hs.213586	ESTs, Weakly similar to KIAA1353 protein	3.9
	424186	AI536021	Hs.288706	Homo sapiens cDNA FLJ10281 fs, clone HE	3.9
55	449932	AI675444	Hs.263024	ESTs	3.9
	434072	H70854	Hs.283059	Homo sapiens PRO1082 mRNA, complete cds	3.9
	434784	AA649051	Hs.164007	ESTs	3.9
	425146	AW954627		gb:EST366697 MAGE resequences, MAGC Homo	3.9
	428538	AA446440	Hs.98643	ESTs	3.9
60	443318	AI051603	Hs.133141	ESTs	3.9
	416857	AA188775	Hs.292453	ESTs	3.9
	411688	AW953440		gb:EST365510 MAGE resequences, MAGB Homo	3.9
	447343	AA256641	Hs.236894	ESTs, Highly similar to S02392 alpha-2-m	3.8
	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger	3.8
65	403696			C40011007:gil5852342[gb]AAD54015.11 (AF0	3.8
	415884	H22966	Hs.13471	ESTs	3.8
	432646	AW753310		gb:RC3-CT0254-031099-012-c05 CT0254 Homo	3.8
	447057	AI423407	Hs.157697	ESTs	3.8
	400814			Target Exon	3.8
70	441329	AI203575	Hs.46821	hypothetical protein FLJ20086	3.8
	416664	H72780	Hs.20289	ESTs	3.8
	426044	AA502490	Hs.170290	ESTs	3.8
	455646	BE064420		gb:RC4-BT0311-241199-012-c08 BT0311 Homo	3.8
	419043	T19167	Hs.89566	ets variant gene 1	3.8
75	445075	AI651827	Hs.344767	ESTs	3.8
	457211	AW972585	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	3.8
	420004	AW975532	Hs.164039	ESTs, Moderately similar to I38022 hypot	3.7
	428060	AA420616	Hs.249483	ESTs	3.7
	416427	BE244050	Hs.79307	Rac/Cdc42 guanine exchange factor (GEF)	3.7
80	453038	AW292415	Hs.20509	HBV pX associated protein-8	3.7
	404584			Target Exon	3.7
	447143	AW292408	Hs.152290	ESTs, Highly similar to JC2463 vasoactiv	3.7
	453438	AA69935	Hs.22792	ESTs	3.7
	429643	AA455889	Hs.167279	FYVE-finger-containing Rab5 effector pro	3.7
	458072	AI890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fs, clone K	3.7
	459680	M79082		ESTs	3.7
	432188	AI362952	Hs.2928	solute carrier family 7 (cationic amino	3.7

5	430744	AA485229	Hs.105649	ESTs	3.7
	454392	BE260893	Hs.236131	homeodomain-interacting protein kinase 2	3.7
	454457	AW753456		gb:OV2-CT0261-261099-011-011 CT0261 Homo	3.7
	435095	AA021160	Hs.4750	hypothetical protein DKFZp564K0822	3.7
	438206	AA780385	Hs.187885	ESTs	3.7
	418967	NM_001725	Hs.89535	bactericidal/permeability-increasing pro	3.7
	427809	M26380	Hs.180878	lipoprotein lipase	3.7
	427722	AK000123	Hs.180479	hypothetical protein FLJ20118	3.7
10	413986	Z43567		gb:HSC1FC021 normalized infant brain cDN	3.7
	438898	AJ819863	Hs.106243	ESTs	3.7
	418483	W26076	Hs.221847	ESTs	3.7
	415849	R20529	Hs.6806	ESTs	3.6
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	3.6
	440296	D30829	Hs.180610	splicing factor proline/glutamine rich (	3.6
15	438025	AW501360	Hs.258910	ESTs	3.6
	458970	AW246119	Hs.25300	phosphatidylinositol 4-kinase type II	3.6
	448002	Y15227	Hs.20149	deleted in lymphocytic leukemia, 1	3.6
	432058	AW665996	Hs.130729	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.6
	409557	BE182896	Hs.211193	ESTs	3.6
20	418049	AA211467	Hs.190488	Homo sapiens, Similar to nuclear localiz	3.6
	425331	AW962128		gb:EST374201 MAGE resequences, MAGG Homo	3.6
	424061	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (I	3.6
	404185			Target Exon	3.6
25	427517	AA644142	Hs.7107	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.6
	421094	AW978202	Hs.289064	hypothetical protein FLJ22251	3.6
	440388	AJ693520	Hs.223000	ESTs	3.6
	415934	NM_000928	Hs.992	phospholipase A2, group IB (pancreas)	3.6
	408292	AW178363		gb:RC3-HT0105-010999-002-H06 HT0105 Homo	3.6
30	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	3.6
	451826	AA020741	Hs.171611	ESTs	3.6
	427375	AL035460	Hs.177536	metallocarboxypeptidase CPX-1	3.6
	419485	AA489023	Hs.99807	ESTs, Weakly similar to unnamed protein	3.6
	416370	N90470	Hs.203697	ESTs, Weakly similar to I38022 hypotheti	3.6
35	418400	BE243026	Hs.301889	KIAA0246 protein	3.5
	436674	AA725002	Hs.272018	low molecular mass ubiquitinone-binding pr	3.5
	407013	U35637		gb:Human nebulin mRNA, partial cds	3.5
	403108			ENSP00000241415; Hypothetical 67.7 kDa p	3.5
	422564	AJ148008	Hs.222120	ESTs	3.5
40	450297	AW901347	Hs.38592	hypothetical protein FLJ23342	3.5
	436338	W92147	Hs.118394	ESTs	3.5
	447458	AJ741082	Hs.158961	ESTs	3.5
	457364	AW971037		gb:EST383123 MAGE resequences, MAGK Homo	3.5
	458814	AJ498957	Hs.170881	ESTs, Weakly similar to Z195_HUMAN ZINC	3.5
45	441701	AW339828	Hs.127497	ESTs	3.5
	405558			Target Exon	3.5
	452682	AA456193	Hs.9071	progesterone membrane binding protein	3.5
	434589	AF147363		gb:Homo sapiens full length insert cDNA	3.5
	443282	T47764	Hs.132917	ESTs	3.5
50	405183			NM_016358; Homo sapiens Iroquois homeobo	3.5
	410064	XS3416	Hs.195464	filamin A, alpha (actin-binding protein-	3.5
	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypotheti	3.5
	404272			Target Exon	3.5
	428808	AA436007	Hs.188780	ESTs	3.5
55	447444	AK000318	Hs.18616	hypothetical protein FLJ20311	3.5
	450475	AW805834	Hs.205015	ESTs	3.4
	454451	AW848708		gb:OV3-CT0192-211099-008-g02 CT0192 Homo	3.4
	400379	NM_018432		Homo sapiens ovarian cancer related prot	3.4
60	440948	AW188311	Hs.128619	ESTs	3.4
	449611	AJ970394	Hs.197075	ESTs	3.4
	445666	R59960	Hs.282386	ESTs	3.4
	445828	F05802	Hs.81907	ESTs	3.4
	437528	N59646	Hs.169745	crumbs (Drosophila) homolog 1	3.4
	442927	AJ024347	Hs.131519	ESTs	3.4
65	451130	AJ762250	Hs.345554	ESTs	3.4
	454765	AW819629		gb:RC5-ST0293-140200-014-H05 ST0293 Homo	3.4
	459200	Y09306	Hs.30148	homeodomain-interacting protein kinase 3	3.4
	433791	AA719352	Hs.112718	ESTs	3.4
	444911	U06117	Hs.250	xanthine dehydrogenase	3.4
70	439753	BE262233	Hs.7423	hypothetical protein from EUROIMAGE 2168	3.4
	440933	AJ208217	Hs.142879	ESTs	3.4
	447726	AL137638	Hs.19368	matrilin 2	3.4
	403849			Target Exon	3.4
	422418	AK001383	Hs.116385	hypothetical protein FLJ10521	3.3
75	439533	W76021		gb:zd64c04.r1 Soares_fetal_heart_NbHH19W	3.3
	416422	H60457		ESTs, Moderately similar to ZN91_HUMAN Z	3.3
	441668	AJ811973	Hs.136313	ESTs	3.3
	432890	NM_014442	Hs.279751	sialic acid binding Ig-like lectin 8	3.3
	412135	AW895309		gb:OV4-NN0038-300300-155-e07 NN0038 Homo	3.3
80	417130	AW276858	Hs.81256	S100 calcium-binding protein A4 (calcium	3.3
	447854	AW138454	Hs.11594	ESTs	3.3
	448048	BE281291	Hs.170408	ESTs, Moderately similar to A47582 B-cel	3.3
	404632			NM_022490; Homo sapiens hypothetical prot	3.3
	411565	AW851728		gb:MR2-CT0222-011199-007-006 CT0222 Homo	3.3

	436267	AW450938	Hs.180115	ESTs	3.3
	426625	T78300	Hs.300642	serologically defined colon cancer anti	3.3
	401272			C9000559* <sup>g</sup> g12314195jamb CAB99338.1  (A	3.3
	433128	AB021923	Hs.23367	EST-YD1 protein	3.3
5	401702			NM_001171*:Homo sapiens ATP-binding cass	3.3
	454363	AW816274	Hs.250154	hypothetical protein FLJ12973	3.3
	440332	AI218517	Hs.189051	ESTs	3.3
	454177	AW807321		gb:MR4-ST0062-240300-003-g05 ST0062 Homo	3.3
	423784	AK000039	Hs.132826	Homo sapiens cDNA FLJ14913 fts, clone PL	3.3
10	440668	AW404591	Hs.147440	ESTs, Weakly similar to Z192_HUMAN ZINC	3.3
	410267	AW978005	Hs.12600	N-ethylmaleimide-sensitive factor attach	3.3
	455778	BE088746		gb:CM2-BT0693-210300-123-009 BT0693 Homo	3.3
	430183	BE010038		gb:PM3-BN0176-100400-001-g04 BN0176 Homo	3.2
	451597	AW295250	Hs.207536	ESTs	3.2
15	451446	AI826288	Hs.171637	hypothetical protein MGC2628	3.2
	421353	AW292857	Hs.255130	ESTs	3.2
	442710	AI015631	Hs.23210	ESTs	3.2
	420560	AW207748	Hs.59115	ESTs	3.2
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	3.2
20	437834	AA769294	Hs.283854	gb:nz36g03.s1 NCI_CGAP_GCB1 Homo sapiens	3.2
	430694	AA810624	Hs.30936	ESTs, Weakly similar to H2B8_HUMAN HISTO	3.2
	412021	AW885592		gb:RCA-OT0071-090300-011-g11 OT0071 Homo	3.2
	443431	AI056847	Hs.20654	ESTs	3.2
	445774	AI254165	Hs.339968	ESTs	3.2
25	413335	AI813318	Hs.48442	ESTs	3.2
	450692	H50603	Hs.94037	hypothetical protein FLJ23053	3.2
	411671	BE049094		ESTs	3.2
	404592			NM_022739*:Homo sapiens E3 ubiquitin lig	3.2
	402747			Target Exon	3.2
30	428500	AW863261	Hs.242413	hypothetical protein DKFZp434K1421	3.2
	420300	AA258245	Hs.127573	Homo sapiens FKSG41 (FKSG41) mRNA, compl	3.2
	445347	AF035318	Hs.12533	Homo sapiens clone 23705 mRNA sequence	3.2
	458438	AI141520	Hs.151464	ESTs, Weakly similar to ALUC_HUMAN !!!	3.2
	442314	AI311854	Hs.129220	ESTs	3.2
35	436291	BE568452	Hs.344037	protein regulator of cytokinesis 1	3.2
	413249	AF167160	Hs.75251	DEAD/H (Asp-Glu-Ala-Asp/Hs) box binding	3.2
	448789	BE539108	Hs.22051	hypothetical protein MGC15548	3.2
	403291			Target Exon	3.2
	436210	AI825420	Hs.197824	ESTs	3.2
40	418079	R40058	Hs.6911	ESTs	3.2
	413951	AW051200	Hs.75640	natriuretic peptide precursor A	3.2
	435828	AA700705	Hs.13852	ESTs	3.2
	437722	AW292847	Hs.122872	ESTs, Weakly similar to JU0033 hypothesi	3.2
	451418	BE387790	Hs.26369	hypothetical protein FLJ20287	3.2
45	405046			C3000978:gi9280045 dbj BAB01579.1  (AB0	3.1
	444315	R07860	Hs.20039	ESTs	3.1
	453095	AW294631	Hs.11325	ESTs	3.1
	433835	AI806185		gb:wf26a10.x1 Soares_NFL_T_GBC_S1 Homo s	3.1
50	430608	R45584	Hs.23025	ESTs, Weakly similar to ALU5_HUMAN ALU S	3.1
	453324	W26592	Hs.232089	ESTs	3.1
	414884	RS4418	Hs.183745	hypothetical protein FLJ13456	3.1
	446862	AV660697	Hs.282700	ESTs	3.1
	427241	AA399968	Hs.112087	Human DNA sequence from clone RP11-530N1	3.1
	416486	H81336	Hs.37560	ESTs	3.1
55	429940	W25215		gb:zb87a09.r1 Soares_senescent_fibroblas	3.1
	430535	AW968485		gb:EST380561 MAGE resequences, MAGL Homo	3.1
	439544	W26354	Hs.28891	hypothetical protein FLJ11380; artemis p	3.1
	437083	AW082597	Hs.244862	ESTs	3.1
	435677	AA694142	Hs.293726	ESTs, Weakly similar to TSGA RAT TESTIS	3.1
60	458810	BE407125	Hs.231510	ESTs	3.1
	443484	AI091458	Hs.134559	ESTs	3.1
	427581	NM_014768	Hs.179703	KIAA0129 gene product	3.1
	444016	AA448154		gb:zw82h09.r1 Soares_testis_NHT Homo sap	3.1
	423337	NM_004655	Hs.127337	axin 2 (conductin, axil)	3.1
65	403288			C1001737* <sup>g</sup> g17511201 pir T27904 hypothe	3.1
	450125	AA005418	Hs.158186	ESTs	3.1
	438138	R98299	Hs.177502	ESTs	3.1
	436222	AI208737	Hs.122810	Homo sapiens cDNA FLJ11489 fts, clone HE	3.1
	443433	R44743	Hs.301667	ESTs	3.1
70	443725	AW245680	Hs.9701	growth arrest and DNA-damage-inducible,	3.1
	432044	AW972727		gb:EST384819 MAGE resequences, MAGL Homo	3.1
	405760			Target Exon	3.1
	423789	AK002084	Hs.132851	hypothetical protein FLJ11222	3.1
	411605	AW006831	Hs.177530	ESTs	3.1
75	417893	AA290605	Hs.190002	ESTs	3.1
	449246	AW411209	Hs.23363	hypothetical protein FLJ10983	3.1
	429528	AI985303	Hs.99361	ESTs	3.1
	456645	AF227156	Hs.110103	RNA polymerase I transcription factor RR	3.1
	412490	AW803564	Hs.288850	Homo sapiens cDNA: FLJ22528 fts, clone H	3.1
80	421679	AI475110	Hs.203933	ESTs	3.1
	434503	T96231	Hs.17762	ESTs	3.1
	450756	AI733488	Hs.144062	ESTs	3.1
	415293	R49462	Hs.106541	ESTs	3.0



	403212		NM_019595: Homo sapiens intersectin 2 (IT	3.0
	422757	A1909935	Hs.65551 Homo sapiens, Similar to DNA segment, Ch	3.0
	427624	AA06245	Hs.24895 ESTs	3.0
	449256	AA059050	Hs.59847 ESTs	3.0
5	411543	AW851248	gb:IL3-CT0220-160200-066-F01 CT0220 Homo	3.0
	409112	BE243971	Hs.50649 quinone oxidoreductase homolog	3.0
	414403	AW969551	Hs.76064 ribosomal protein L27a	3.0
	427418	AA402587	Hs.325520 LAT1-3TM protein	3.0
10	455481	AW948317	gb:RCD-MT0015-280300-021-a09 MT0015 Homo	3.0
	444396	T65213	Hs.4257 ESTs	3.0
	407235	D20569	Hs.169407 SAC2 (suppressor of actin mutations 2, y	3.0
	431431	AL096711	Hs.252953 Human DNA sequence from clone RP3-403A15	3.0
	451391	AA017410	Hs.40568 ESTs	3.0
15	430251	AA609246	Hs.181451 ESTs	3.0
	420658	AW965215	Hs.130707 ESTs	3.0
	442786	HS0733	Hs.256261 ESTs, Moderately similar to ALU8_HUMAN A	3.0
	440897	AW104275	Hs.148348 ESTs	3.0
	444608	AW571659	Hs.278081 ESTs	3.0
20	433062	AK001757	Hs.281348 hypothetical protein FLJ10895	3.0
	408523	AW833259	Hs.314287 ESTs	3.0
	443477	R32325	Hs.221794 ESTs	3.0
	423869	BE409301	Hs.134012 C1q-related factor	3.0
	405488		ENSP00000220888: ZINC FINGER TRANSCRIPT	3.0
25	414988	C17535	gb:C17535 Human placenta cDNA (TFujwara	3.0
	440471	AA886146	Hs.307944 ESTs	3.0
	416355	H49875	Hs.268906 ESTs	3.0
	408926	AF217525	Hs.49002 Down syndrome cell adhesion molecule	3.0
	424028	AF055084	Hs.153692 Homo sapiens cDNA FLJ14354 fs, clone Y7	2.9
30	438201	AA780243	Hs.54547 ESTs	2.9
	413851	AW897510	Hs.137387 ESTs	2.9
	402229	BE262804	Hs.282385 mitochondrial ribosomal protein S2	2.9
	444145	BE153823	Hs.132776 ESTs, Weakly similar to 2004399A chromos	2.9
	423770	AW976766	Hs.29076 Homo sapiens cDNA FLJ10077 fs, clone HE	2.9
35	439627	BE621702	Hs.238246 hypothetical protein FLJ21841	2.9
	414232	W86946	Hs.238246 hypothetical protein FLJ22479	2.9
	400533		ENSP00000209376: PRE65 protein (Fragmen	2.9
	440483	AI200836	Hs.150386 ESTs	2.9
	443502	AI074528	Hs.133949 ESTs	2.9
40	449667	AB023227	Hs.23860 KIAA1010 protein	2.9
	446809	AW590171	Hs.101413 ESTs	2.9
	408788	AL134947	Hs.213956 Homo sapiens BAC clone RP11-10205 from Y	2.9
	413627	BE182082	Hs.246973 ESTs	2.9
	449655	AI021987	Hs.59970 ESTs	2.9
45	407378	AA299264	Hs.57776 ESTs, Moderately similar to I38022 hypot	2.9
	400090		Eos Control	2.9
	454968	AW849046	gb:IL3-CT0214-150300-085-H06 CT0214 Homo	2.9
	423352	AA324808	Hs.193576 ESTs	2.9
50	426197	AA004410	Hs.100009 acyl-Coenzyme A oxidase 1, palmitoyl	2.9
	452102	U04343	Hs.27954 CD86 antigen (CD28 antigen ligand 2, B7-	2.9
	415346	Z43108	gb:HSC13E071 normalized infant brain cDN	2.9
	436726	AA324975	Hs.198689 ESTs, Weakly similar to T00079 hypotheti	2.9
	442513	AF150207	Hs.207949 ESTs	2.9
	425012	T77666	Hs.92414 Homo sapiens cDNA: FLJ22030 fs, clone H	2.9
55	402322		Target Exon	2.9
	427235	AI126288	Hs.192232 ESTs	2.9
	456412	AW749617	Hs.280776 tankyrase, TRF1-interacting ankyrin-rela	2.9
	431196	AW974436	Hs.154929 ESTs	2.9
	439379	AA835002	Hs.125611 ESTs	2.9
60	423757	AL049337	Hs.132571 Homo sapiens mRNA: cDNA DKFZp564P016 (fr	2.9
	446134	AW161234	Hs.13993 TBP-like 1	2.9
	435645	AI052789	Hs.133263 ESTs	2.9
	449385	AI650471	Hs.347290 ESTs	2.9
	444161	N52543	Hs.142940 ESTs	2.9
65	406635	U07162	gb:Human clone LNA11 autoantibody Ig hea	2.9
	419239	AA468183	Hs.184598 Homo sapiens cDNA: FLJ23241 fs, clone C	2.9
	458760	AI498831	Hs.111334 ferritin, fight polypeptide	2.9
	427245	AA421022	Hs.97739 ESTs	2.9
	400658		ENSP00000237081: KIAA1217 PROTEIN (FRAGM	2.9
70	430701	AI760833	Hs.293971 ESTs	2.9
	435294	T84084	Hs.196008 Homo sapiens cDNA FLJ11723 fs, clone HE	2.9
	429927	NM_001115	Hs.2522 adenylyl cyclase 8 (brain)	2.9
	446160	AW392197	Hs.218003 ESTs	2.9
	420674	NM_000055	Hs.1327 butyrylcholinesterase	2.9
75	424330	AW073953	Hs.333396 Homo sapiens cDNA FLJ13596 fs, clone PL	2.9
	418915	AI474778	Hs.118977 ESTs	2.9
	425922	AI157466	Hs.162751 Homo sapiens mRNA: cDNA DKFZp761E2423 (f	2.9
	447512	AW958148	Hs.129454 ESTs	2.9
	449990	AI279010	Hs.48821 ESTs	2.8
80	423779	AW071837	Hs.57971 ESTs	2.8
	427395	AW298741	Hs.97861 ESTs, Moderately similar to I38022 hypot	2.8
	416188	BE157260	Hs.79070 v-myc avian myelocytomatosis viral oncog	2.8
	426746	J03626	Hs.2057 uridine monophosphate synthetase (prolat	2.8
	400362	AF068294	Hs.272414 Homo sapiens HDICB45P mRNA, partial cds	2.8

	457579	AB030816	Hs.36761	KRAS-like suppressor	2.8
	451059	AW297465	Hs.267150	KIAA1409 protein	2.8
	403903			C5001632:gi10645308 gbAAAG21430.1 AC00	2.8
	444491	AI151091	Hs.270714	ESTs	2.8
5	455899	BE155112		gb:PM1-HT0350-151299-003-s03 HT0350 Homo	2.8
	457292	AI921270	Hs.281462	hypothetical protein FLJ14251	2.8
	428305	AA446628	Hs.2799	cartilage linking protein 1	2.8
	435375	AI733610	Hs.187832	ESTs	2.8
	409078	AW327515	Hs.345209	ESTs	2.8
10	436109	AA922153	Hs.132760	hypothetical protein MGC15729	2.8
	444656	AI277924	Hs.145199	ESTs	2.8
	426384	AI472078	Hs.303662	hypothetical protein FLJ13189 (FLJ13189)	2.8
	424200	AA337221		gb:EST41944 Endometrial tumor Homo sapie	2.8
	438243	AI581311		ESTs	2.8
15	434012	AA621425	Hs.186256	ESTs	2.8
	402711			Target Exon	2.8
	442955	AI683534	Hs.131583	ESTs	2.8
	418319	AW611703	Hs.190173	ESTs, Weakly similar to A46010 X-linked	2.8
	438934	BE220137	Hs.124323	ESTs	2.8
20	438689	AW129261	Hs.181672	ESTs	2.8
	420083	AA478847	Hs.42484	hypothetical protein FLJ10618	2.8
	400315	U46120	Hs.193392	Human expressed unknown mRNA	2.8
	433563	AI732637	Hs.277901	ESTs	2.8
	458093	AI207788	Hs.343628	sialyltransferase 4B (beta-galactosidase	2.8
25	409157	AA064631		gb:z72c03.s1 Soares_pineal_gland_N3HPG	2.8
	450597	AI701635	Hs.207077	ESTs	2.8
	425300	AW601773	Hs.270259	ESTs	2.8
	458817	Z25900	Hs.18724	Homo sapiens mRNA; cDNA DKFZp564F093 (fr	2.8
	418312	AW972468	Hs.170307	Rai guanine nucleotide exchange factor R	2.8
30	430335	D80007	Hs.239499	KIAA0185 protein	2.8
	454581	AW809189		gb:MR4-ST0118-261099-012-e10 ST0118 Homo	2.8
	419735	AW750056	Hs.169577	Homo sapiens cDNA FLJ14743 fs, clone NT	2.8
	436265	AA731331	Hs.190668	ESTs	2.8
	439481	AF086294	Hs.125844	ESTs	2.8
35	441964	AA972619	Hs.20506	ESTs, Weakly similar to I38022 hypotheti	2.8
	422648	D86983	Hs.118893	Melanoma associated gene	2.8
	430503	AA533574	Hs.152274	ESTs	2.8
	403942			Target Exon	2.8
	420565	AI806770	Hs.30258	ESTs	2.8
40	439069	H63144	Hs.184178	ESTs, Weakly similar to ALUB_HUMAN !!!!	2.8
	436480	AJ271643	Hs.87459	putative acid-sensing ion channel	2.8
	408137	AI694131	Hs.29002	KIAA1708 protein	2.8
	451692	AL137422	Hs.26849	Homo sapiens mRNA; cDNA DKFZp761A1623 (f	2.8
	419713	AW968058	Hs.92381	nudix (nucleoside diphosphate linked mol	2.8
45	452526	W38537	Hs.280740	hypothetical protein MGC3040	2.8
	414300	AI304870	Hs.188680	ESTs	2.8
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	2.8
	437933	AI276132	Hs.146155	ESTs	2.7
	405941			Target Exon	2.7
50	443210	AI692649	Hs.9451	hypothetical protein MGC13168	2.7
	450651	W79000	Hs.44545	ESTs, Weakly similar to B34087 hypotheti	2.7
	426765	AA743603	Hs.172108	nucleoporin 88kD	2.7
	418886	AA993982	Hs.130858	ESTs	2.7
	429483	AA974832	Hs.128708	ESTs	2.7
55	430426	AA478807	Hs.125173	ESTs	2.7
	439019	AF085902	Hs.271737	ESTs	2.7
	400924			Target Exon	2.7
	458070	AW503578	Hs.209406	ESTs, Weakly similar to I38600 zinc fing	2.7
	427299	AA830210	Hs.214263	ESTs, Moderately similar to ALU1_HUMAN A	2.7
60	442621	AI004333	Hs.130553	ESTs, Weakly similar to ALUA_HUMAN !!!!	2.7
	437843	AL080280		gb:Homo sapiens mRNA full length insert	2.7
	426925	NM_001198	Hs.315689	Homo sapiens cDNA: FLJ22373 fs, clone H	2.7
	443392	AI055821	Hs.293420	ESTs	2.7
	429972	AI700846	Hs.234518	ribosomal protein L23	2.7
65	438875	AA827640	Hs.189059	ESTs	2.7
	422551	AW967284		gb:EST379359 MAGE resequences, MAGJ Homo	2.7
	446139	H77395	Hs.39749	ESTs	2.7
	429115	AA446728	Hs.289020	Homo sapiens cDNA FLJ14098 fs, clone MA	2.7
70	428612	AA770001	Hs.188778	ESTs	2.7
	439947	AB006627	Hs.6788	astrolectin	2.7
	439699	AF086534	Hs.187561	ESTs, Moderately similar to ALU1_HUMAN A	2.7
	438335	AI498421	Hs.243168	ESTs	2.7
	456680	AL137768	Hs.116072	Homo sapiens mRNA; cDNA DKFZp434H245 (fr	2.7
75	412074	S74683	Hs.73139	ADP-ribosyltransferase 1	2.7
	412225	AW902042		gb:QV0-NN1022-170400-193-c02 NN1022 Homo	2.7
	438801	AA825971	Hs.124284	ESTs	2.7
	442892	AI038379	Hs.131865	ESTs	2.7
	432984	AF118395	Hs.279865	trans-prenyltransferase	2.7
	403790			NM_001334*:Homo sapiens cathepsin O (CTS	2.7
80	400335	Y13187	Hs.248068	Homo sapiens dmd gene, intron 11	2.7
	415467	R50891	Hs.260274	ESTs	2.7
	428715	AW293716	Hs.53126	ESTs	2.7
	457750	AI651474	Hs.163944	ESTs	2.7

5	424480	AA341442	Hs.205299	ESTs	2.7
	444822	BE164351	Hs.292767	hypothetical protein FLJ23109	2.7
	432651	AW973744	Hs.293100	ESTs	2.7
	439823	AW665287	Hs.124514	ESTs	2.7
	457021	AW968934	Hs.173108	Homo sapiens cDNA: FLJ21897 fs, clone H	2.7
	440026	AA861299	Hs.160371	ESTs	2.7
	446960	AW294936	Hs.156762	ESTs	2.7
	435046	AA662772	Hs.174330	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.7
10	431999	AL133573	Hs.272312	Homo sapiens mRNA; cDNA DKFZp434J2235 (I	2.7
	458527	AI950256	Hs.224875	ESTs	2.7
	445899	AI263738	Hs.145626	ESTs	2.7
	404254			ENSP00000082468*DJ45P21.3 (butyrophilin	2.7
	402344			Target Exon	2.7
15	426503	AA380153		gb:EST93093 Skin tumor 1 Homo sapiens cD	2.7
	446420	AW015693	Hs.135614	ESTs	2.7
	426914	AA393328	Hs.194303	ESTs	2.7
	407903	AI287341	Hs.154029	bHLH factor Hes4	2.7
	433009	AA761668		gb:uz24c08.s1 NCI_CGAP_GCB1 Homo sapiens	2.7
20	403431			Target Exon	2.7
	403290			C10001011:gi4758212ref[NP_004411.1] d	2.7
	435143	R12375	Hs.194600	ESTs	2.7
	416569	H64891		gb:yr68h03.r1 Soares fetal liver spleen	2.7
	428690	AI948490	Hs.98765	ESTs	2.7
25	425128	BE561929	Hs.154718	tumor protein D52-like 2	2.7
	443361	AI792628	Hs.133273	ESTs	2.7
	404053			Target Exon	2.6
	435113	AA665469	Hs.117136	ESTs	2.6
	405717			CX000838:gi10092633ref[NP_055314.1] pu	2.6
30	413098	BE065279		gb:RC1-BT0314-030500-016-b09 BT0314 Homo	2.6
	444884	AI201094	Hs.148540	ESTs	2.6
	419015	T79262	Hs.14463	ESTs	2.6
	423234	AA323534	Hs.296162	AD037 protein	2.6
	406871	AA993857	Hs.180842	ribosomal protein L13	2.6
35	428670	AA431682	Hs.134832	ESTs	2.6
	408371	AF161545	Hs.44439	hypothetical protein	2.6
	413929	BE501689	Hs.75617	collagen, type IV, alpha 2	2.6
	404369	R38438	Hs.182575	solute carrier family 15 (H777) transport	2.6
	419817	AA743434	Hs.193778	ESTs	2.6
40	415788	AW628686	Hs.78851	KIAA0217 protein	2.6
	427388	BE379610	Hs.177592	ribosomal protein, large, P1	2.6
	451018	AW965599	Hs.247324	mitochondrial ribosomal protein S14	2.6
	405863			Target Exon	2.6
	454037	AW998716		gb:PM4-BN0067-250300-002-f11 BN0067 Homo	2.6
45	430147	R60704	Hs.234434	hair/eyenhancer-of-split related with YRP	2.6
	425480	AB023198	Hs.158135	KIAA0981 protein	2.6
	407182	AA312551	Hs.230157	ESTs	2.6
	439538	AA837323	Hs.56407	ESTs	2.6
	449249	T52285	Hs.193115	Homo sapiens mRNA for KIAA1764 protein,	2.6
50	429569	AA454993	Hs.138343	ESTs, Weakly similar to I78885 serine/th	2.6
	402936			ENSP00000217246*DJ803K15.1 (novel prote	2.6
	420670	AW973577		ESTs	2.6
	455409	AW936832		gb:PM2-DT0023-050400-003-h03 DT0023 Homo	2.6
	413151	H47969	Hs.141971	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.6
55	422484	AA568770	Hs.123158	Homo sapiens cDNA FLJ12830 fs, clone NT	2.6
	400780			NM_007325*Homo sapiens glutamate recept	2.6
	429258	AA448765		gb:zx10e09.r1 Soares_total_fetus_Nb2HF8_	2.6
	448970	AW138582		gb:UH-H-B11-acw-a-06-0-UI.s1 NCI_CGAP_Su	2.6
	402615			C1003844*gi6912550ref[NP_036483.1] d	2.6
60	417099	BE537357	Hs.306995	hypothetical protein MGC5457	2.6
	428397	AA428040		gb:zw50e02.r1 Soares_total_fetus_Nb2HF8_	2.6
	449164	AI632772	Hs.264165	ESTs	2.6
	412584	X54870	Hs.74085	DNA segment on chromosome 12 (unique) 24	2.6
	443635	AI080230	Hs.134214	ESTs	2.6
65	402981			Target Exon	2.6
	433258	AI806626	Hs.207300	ESTs, Weakly similar to ALUB_HUMAN !!!!	2.6
	428917	AA437337	Hs.16689	ESTs	2.6
	418557	BE140602	Hs.246645	ESTs	2.6
	445211	BE045601	Hs.118248	ESTs, Weakly similar to YC18_HUMAN HYPOT	2.6
70	404423			C8000067*gi10432400jemb[CAC10290.1] (A	2.6
	435953	AI767087	Hs.114142	ESTs	2.6
	435937	AA830893	Hs.119769	ESTs	2.6
	439220	AW295340	Hs.130417	ESTs, Weakly similar to Z195_HUMAN ZINC	2.6
	419597	W73592		gb:zd50c01.s1 Soares_fetal_heart_NbHH19W	2.6
75	436852	AI814817	Hs.269099	ESTs	2.6
	430569	AF241254	Hs.178098	angiotensin I converting enzyme (pepdy	2.6
	443845	AI590084	Hs.148485	ESTs, Weakly similar to A47161 Mac-2-bin	2.6
	414223	AA954566	Hs.238246	hypothetical protein FLJ22479	2.6
	443770	AW815924		gb:MR3-ST0218-191199-012-a10 ST0218 Homo	2.6
80	450443	AA009847	Hs.120744	ESTs	2.6
	435523	T62849	Hs.11090	membrane-spanning 4-domains, subfamily A	2.6
	400492			C10001573*gi7302749gb[AAAF57827.1] (AE	2.6
	450202	AW969756	Hs.34145	ESTs, Weakly similar to B49647 GTP-bind	2.6
	416845	H95279	Hs.293788	gb:yu20h02.s1 Soares fetal liver spleen	2.6

	446423	AW139655	Hs.150120	ESTs	2.6
	447587	AW282139	Hs.115789	ESTs	2.6
	437014	AA808757	Hs.22531	ESTs, Weakly similar to S59501 interfero	2.6
5	426411	AK000708	Hs.169764	hypothetical protein FLJ20701	2.6
	432668	AA556601	Hs.43296	ESTs	2.6
	436682	AI590055	Hs.124110	ESTs	2.6
	426894	AI204209	Hs.143911	ESTs	2.6
	402605			Target Exon	2.6
10	457554	AA570111	Hs.155873	ESTs, Weakly similar to ALUE_HUMAN !!!!	2.8
	438166	N30158	Hs.122645	ESTs	2.6
	443021	AA368546	Hs.8904	Ig superfamily protein	2.6
	427005	AA394228	Hs.97494	ESTs	2.6
	437085	AA743935	Hs.202329	ESTs	2.6
15	408603	R25283	Hs.326416	Homo sapiens mRNA; cDNA DKFZp564H1916 (f	2.6
	431019	NM_005249	Hs.2714	forkhead box G1B	2.5
	437287	AA748180	Hs.159346	hypothetical protein FLJ21369	2.5
	458552	AW136139	Hs.245856	ESTs	2.5
	436350	AA713661	Hs.121091	ESTs	2.5
20	421988	AW450481	Hs.161333	ESTs	2.5
	416704	H77795	Hs.39785	ESTs	2.5
	447830	R58920	Hs.164314	ESTs	2.5
	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	2.5
	406789	AI041403		ribosomal protein L29	2.5
25	433683	AI817723	Hs.22678	hypothetical protein FLJ21832	2.5
	433523	H29882		ESTs	2.5
	452296	T65535	Hs.111539	ESTs	2.5
	428878	AA436884	Hs.48926	ESTs	2.5
	442476	AF069475		gb:AF069475 Homo sapiens astrocytoma lib	2.5
30	452785	AL359942	Hs.296434	erythroid differentiation and denudeat	2.5
	444422	AI786623	Hs.108264	ESTs	2.5
	420579	AA278449	Hs.137429	ESTs	2.5
	416505	H66470	Hs.16004	ESTs	2.5
	402595			C1001578*.gij8759903igbjAAAF28099.1 (AF1	2.5
35	447930	R44574	Hs.107510	ESTs	2.5
	459527	AW977556	Hs.291735	ESTs, Weakly similar to I78885 serine/th	2.5
	458421	AI279978	Hs.22547	ESTs	2.5
	427527	AI809057	Hs.293441	immunoglobulin heavy constant mu	2.5
	436035	AA703679	Hs.106999	ESTs, Weakly similar to SYTS_HUMAN SYNAP	2.5
40	453362	H14988	Hs.107375	ESTs	2.5
	423600	AI633569	Hs.310359	ESTs	2.5
	433325	AW206986	Hs.143905	ESTs	2.5
	415983	AI438798	Hs.117078	Homo sapiens cDNA: FLJ23028 fs, clone L	2.5
	431198	AL047634	Hs.231913	ESTs	2.5
45	430530	AA480870	Hs.47660	ESTs	2.5
	455276	BE176479		gb:RC3-HT0585-160300-022-b09 HT0585 Homo	2.5
	416665	H72974		gb:yu28a10.s1 Soares fetal liver spleen	2.5
	422352	AA766296	Hs.99200	ESTs	2.5
	427813	AW273851	Hs.98025	ESTs	2.5
50	453685	AL110309		gb:DKFZp564L0278_r1 564 (synonym: hibr2)	2.5
	450508	R37408	Hs.101654	ESTs	2.5
	436361	AA825814	Hs.149065	ESTs	2.5
	427709	AI631811	Hs.180403	STRIN protein	2.5
	432036	AF224266	Hs.272373	Interleukin 20	2.5
55	422752	BE247253	Hs.21263	suppressor of potassium transport defect	2.5
	413786	AW613780	Hs.13500	ESTs	2.5
	439706	AW872527	Hs.59761	ESTs, Weakly similar to DAP1_HUMAN DEATH	2.5
	451533	NM_004657	Hs.26530	serum deprivation response (phosphatidyl	2.5
	414959	D59968	Hs.45184	Homo sapiens cDNA FLJ12284 fs, clone MA	2.5
60	449919	AI674685	Hs.200141	ESTs	2.5
	456891	AI659166	Hs.207144	ESTs	2.5
	427140	AA398487	Hs.97642	ESTs	2.5
	405239	U89281		oxidative 3 alpha hydroxysteroid dehydro	2.5
65	428450	NM_014791	Hs.184339	KIAA0175 gene product	2.5
	443753	AW387578	Hs.134749	ESTs	2.5
	432888	T86823		gb:yd81a08.s1 Soares fetal liver spleen	2.5
	445065	AI806657	Hs.302024	glycoprotein beta-Gal 3-sulfotransferas	2.5
	431202	AA495824	Hs.188822	ESTs, Weakly similar to A46010 X-linked	2.5
	445658	AI469062	Hs.172660	ESTs	2.5
70	435330	R16769	Hs.173174	Homo sapiens cDNA FLJ14429 fs, clone HE	2.5
	435703	AW630133	Hs.83313	GK003 protein	2.5
	458232	AL040357		gb:DKFZp434O0713_r1 434 (synonym: htes3)	2.5
	421955	AK000160	Hs.121576	Homo sapiens cDNA FLJ20153 fs, clone CO	2.5
	420796	L34355	Hs.99931	sarcoglycan, alpha (50kD dystrophin-asso	2.5
75	425428	AL110261	Hs.157211	DKFZP586B0621 protein	2.5
	437627	AW469925	Hs.257837	ESTs	2.5
	408574	AA328046	Hs.46405	polymerase (RNA) II (DNA directed) polyp	2.5
	418733	AA227714	Hs.179703	KIAA0129 gene product	2.5
	440473	BE562314	Hs.98711	Homo sapiens, clone IMAGE:3677165, mRNA,	2.5
80	422106	D84239	Hs.111732	Fc fragment of IgG binding protein	2.5
	411480	AW848022		gb:IL3-CT0214-231299-053-A09 CT0214 Homo	2.5
	436391	AJ227892	Hs.146274	ESTs	2.5
	424947	R77952		ESTs, Weakly similar to alternatively sp	2.5
	450831	R37974	Hs.25255	ESTs	2.5

447527	AJ702896	Hs.42091	ESTs	2.5
424686	AA345504		gb:EST51529 Gall bladder II Homo sapiens	2.5
453385	AW296101	Hs.252806	ESTs	2.5

5

TABLE 128:

Pkey:	Unique Eos probeset identifier number
CAT number:	Gene cluster number
Accession:	Genbank accession numbers

10

Pkey	CAT Number	Accession
406292	1050507_1	AW178363 AW846011 AW845964 AW845988 AW845977 AW846002
409157	110363_1	AA064631 AA722000 AA064793
409189	110687_1	AA125984 AA127189 AA065075 AA070377 AA100017 AA075891 AA113255 AA075168 AA082764 AA083380 N84829 AA084752 AA076512 AA085119

15

411480	1247089_1	AW848022 AW848704 AW848168 AW848959 AW848476 AW848699 AW848700 AW848761
411537	1248899_1	BE073250 BE073378 BE073379 AW850533 AW850529
411543	1249127_1	AW851248 AW851425 AW850805 AW851021 AW850905
411565	1249756_1	AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628
411671	125369_1	BE049094 AA700765 H86770 AA094646 R02483 C03868 N56170

20

411688	1254076_1	AW953440 T08189 AW857085
412021	1272156_1	AW885592 AW885594 AW885579 AW885651
412135	1279148_1	AW895309 AW895290 AW895307 AW895397 AW895378 AW895402 AW895403 AW895311 AW895298 AW895390 AW895488 AW895468 AW895481

25

412225	1284108_1	AW902042 N77591
412811	132943_1	H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z41952 AM24991 AI693507 AI863108 AA599060 AJ091148 AA598689

30

413098	1349115_1	R39887 AA813482 AW016452 H06383 R41807 AJ364268 AA620528 AJ241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734
413986	140720_1	BE065278 BE065306 BE065164 BE065389
414988	1511316_1	Z43567 H24159 AA134240
415131	1523680_1	C17535 D59244 D58878 D79090
415346	1534581_1	D61119 D81508 D81734
416422	1593811_1	Z43108 F06295 R13085
416569	1601567_1	H60457 H68709 H73528 H54335 R87154
416665	1607797_1	H64891 R93444 R93458 R05590

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416665	1607797_1	H72974 W28967
419597	1863413_1	W73692 W73836 W95650

40

420352	192979_1	BE258835 AW968316 AA258918 AW843305 R14744 AI580388 BE071923 R36280
420670	195442_1	AW973577 AA553621 AA278187
422551	217767_1	AW967284 AA312192 AA312203
424009	234177_1	F11690 AW965370 AA333586 D30830
424200	236595_1	AA337221 AA336756 AW966196
424686	242488_1	AA345504 AA345251 AW963243
424947	245247_1	R77952 AA348809 AW959960 AW959962 AI565552 AW070702 AA973910 R85973
425146	247244_1	AW954627 AW954629 AA351258 R25935

45

425331	250199_1	AW962128 AA355353 AA427363
426503	268283_1	AA380153 AA380233 AW963529
428397	290994_1	AA428040 AW889864 AA836434
429258	301917_1	AA448765 C04967 C03045 AA658293
429940	310884_1	W25215 AA461079 AA461391
430183	31412_2	BE010038 AA678833 AI311783 T86895 W68032 BE064393 BE064394 BE157228 BE183282 AI936370 AA552514 T67280 AA039909

50

430535	319643_1	AW968485 AW968670 AA480922 BE350425
432044	340773_1	AW972727 AA524829 AW972733
432646	351909_1	AW753310 AW974000 AA557840 AA558570 AW751539
432888	355780_1	T86823 AJ821425 AI732232 AA569589 AA570737
433009	357371_1	AA761668 AA573621 R92814 R09670

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433523	368873_1	H29882 AW665533 AW149901 AI572917 AA598500 AI686466 AI336390 AW864390 AW864320
433835	374758_1	AI806185 AA610063 AI693089 AI693075
434589	38929_1	AF147363 T47219 T47218

60

436608	42381_3	AA628980 AI126603 BE504035
437034	431713_1	AA742643 AA808575 AW976668
437643	43998_1	AL080280 T73124 H02689 AL080281

65

438243	453072_1	AJ581311 AA781682 AA781678
438458	457837_1	AW975186 AA807807 D29548
439533	47349_1	W76021 AF088052 W72465
442476	543547_1	AF069475 AF069477 AF069476
443770	579849_1	AW815924 AW815926 AI085174

70

444016	58899_1	AA448154 AV647571
448970	791254_1	AW138582 AI638298 AI631640 AI963868 AI611082
450166	82677_1	AA429504 R41904 AA279467 H09648 AA007236
453685	977734_1	AL110309 AW088119 H22881
454037	996287_1	AW998716 AW022148 N68020
454177	1049351_1	AW807321 AW807262 AW177104 AW807319 AW807115 AW807344 AW807324 AW178118 BE141575 AW845849 AW807105 AW845868 BE140942

75

454451	1206502_1	AW807178 AW807167 AW807398 AW807320 AW807306 AW845866
454457	1207274_1	AW846706 AW846703 AW752167 AW846700 AW846699 AW752176 AW846694
454581	1225710_1	AW753456 AW753036 AW854868 AW854862
454765	1233905_1	AW809189 AW809219 AW813574
454860	1237732_1	AW819629 AW854320
454958	1247029_1	AW835767 AW835537 BE160187
455104	1253737_1	AW849046 AW847956 AW849039 AW847957 AW848279 AW848698 AW849034 AW849033

80

455276	1272541_1	BE064863 BE153698 AW856751 BE153820 BE064737 BE153674 BE064730 BE065062 BE153536 AW856622 BE155079 BE064651 BE153665
		BE064650 BE064691
		BE176479 BE176678 BE176357 BE176550 AW886079 BE176676 BE176615 BE176555 BE176489 BE176610 BE176362

455409	1288355_1	AW936832 AW936609 AW936657 AW936611 AW936739 AW936734 AW936779 AW936688 AW936659 AW936738 AW936827 AW936737 AW936736 AW936740 AW936833 AW936777 AW936830 AW936834 AW936829 AW936772 AW936638 AW936658 AW936636 AW936774 AW936778 AW936766 AW936776 AW936831 AW9
5	455481 1283182_1	AW948317 AW948322 AW948329 AW948316 AW948288 AW948330 AW948325 AW948324
	455646 1348557_1	BE064420 BE064435 BE064429 BE064414 BE064400 BE064517
	455778 1364506_1	BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952
	455899 1381547_1	BE155112 BE155154 BE155087 BE155247 BE155499 BE155367 BE155452
	456232 168294_1	ALD40357 AA883621 AA203230
10	456304 176820_1	AI820973 AI734077 AI820984 AA225796 AA225060 AA225101
	457364 328154_1	AW971037 AA508019 AA482345

TABLE 12C:

Play:

Ref:

Strand:

NL\_position:

Unique Eos probeset identifier number

Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

Indicates DNA strand from which exons were predicted.

Indicates nucleotide positions of predicted exons.

Play	Ref	Strand	NL_position
20	400492 9213749	Minus	123881-124090
	400533 6981826	Minus	277132-277595
	400645 8117693	Minus	58471-58716
	400658 8118459	Minus	73525-73644
	400780 8131663	Minus	118372-118619
25	400814 8569925	Minus	72840-72924,74761-74849
	400924 7107613	Minus	30309-30498
	401272 9797373	Minus	98374-98509
	401454 9186923	Minus	114659-114832
	401702 1871197	Minus	68182-68325
30	402229 9965022	Minus	15739-15951,16166-16779
	402274 2835596	Plus	5604-6527
	402322 7630359	Minus	75078-75203
	402344 8099256	Minus	76812-79040
	402595 7705171	Plus	37870-37923,39664-39717,71711-71764
35	402604 9909420	Plus	20393-20767
	402605 9909420	Minus	47680-47973
	402615 9926801	Plus	131390-132157
	402711 8901247	Minus	114306-115418
	402747 9212492	Minus	7105-7357
40	402855 9582953	Minus	59763-59909
	402936 8894303	Plus	51655-51771
	402981 9944246	Minus	45716-45889
	403108 8980955	Plus	83253-93667
	403212 7630897	Minus	156037-156210
45	403288 8081479	Plus	133763-133899,135813-135958
	403290 8083176	Plus	19288-20076
	403291 7230870	Plus	95177-95435
	403349 8569773	Minus	167815-168374
	403431 7139839	Plus	56509-56860
50	403481 9965004	Plus	93496-93633
	403696 3135242	Minus	143467-143634
	403790 8084957	Minus	87826-87947,89835-90002
	403849 7708855	Plus	95043-96519
	403903 7710671	Minus	101165-102597
55	403942 7711825	Minus	99606-99757
	403961 7596978	Minus	110393-110603
	404053 3548785	Plus	61797-64205
	404120 7342152	Plus	135775-136000
	404185 4572584	Minus	129171-129327
60	404254 9367203	Plus	129350-129873
	404272 9885189	Plus	83207-83355,84358-84496,90519-90720,91371-91447
	404423 7407959	Plus	34438-34618
	404584 9857511	Plus	138651-139153
	404592 9943965	Minus	39067-39225
65	404632 9796668	Plus	45096-45229
	405046 7596829	Minus	4373-4528
	405183 7209940	Plus	12335-12653
	405238 7249119	Minus	51728-51836
	405239 7249119	Plus	144345-144464,144690-144836,151750-151883,152407-152484
70	405348 2914717	Minus	43310-43482
	405488 7131455	Minus	75771-75883,105295-105398,134754-134875
	405558 1621110	Plus	4502-4644,5983-6083
	405717 9588573	Plus	11275-11973
	405760 6066938	Minus	37424-38045
75	405863 7657810	Plus	49410-49620
	405941 6758796	Plus	2788-3444
	406395 9256242	Minus	20805-20960
	406478 9857502	Plus	68314-68523,68853-68950
80	406481 9864741	Minus	91439-91579

TABLE 13A: 964 GENES UP-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 13A lists about 678 genes up-regulated in lower grade glioblastoma (LGG) compared to normal normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" LGG to "average" normal tissues was greater than or equal to 3.0. The "average" LGG level was set to the 85<sup>th</sup>

percentile amongst various LGG tumors. The "average" normal tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant adult tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

5	Pkey:	Unique Eos probeset identifier number		
	ExAccn:	Exemplar Accession number, Genbank accession number		
	UnigeneID:	Unigene number		
	Unigene Title:	Unigene gene title		
	R1:	Ratio of LOWER GRADE GLIOBLASTOMA to NORMAL ADULT TISSUES		
10	Pkey	ExAccn	UnigeneID	Unigene Title
	427343	AI880044	Hs.176977	protein kinase C binding protein 2
	409389	AB007979	Hs.301281	Homo sapiens mRNA, chromosome 1 specific
	418375	NM_003081	Hs.84389	synaptosomal-associated protein, 25kD
	431917	D16181	Hs.2868	peripheral myelin protein 2
15	428321	AI699994	Hs.2868	peripheral myelin protein 2
	426325	O28114	Hs.169309	myelin-associated oligodendrocyte basic
	435147	AL133731	Hs.4774	Homo sapiens mRNA; cDNA DKFZp761C1712 (I
	456759	BE259150	Hs.127792	delta (Drosophila)-like 3
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-1
20	429007	D80642		gb:HUM092E09B Human fetal brain (TFujwa
	417183	RS2089	Hs.172717	ESTs
	430838	N46664	Hs.169395	hypothetical protein FLJ12015
	413472	BE242870	Hs.75379	solute carrier family 1 (glut high eff
	425088	AA663372	Hs.169395	hypothetical protein FLJ12015
25	429276	AF056085	Hs.198612	G protein-coupled receptor 51
	424140	Z48051	Hs.141308	myelin oligodendrocyte glycoprotein
	450133	AW969769	Hs.105201	ESTs
	423849	AL157425	Hs.133315	Homo sapiens mRNA; cDNA DKFZp761J1324 (I
	413333	M74028	Hs.75297	fibroblast growth factor 1 (ackic)
30	449494	AW237014	Hs.315369	Homo sapiens cDNA: FLJ23075 fs, clone L
	402604			Target Exon
	412733	AA984472	Hs.74554	KIAA0080 protein
	416829	AB013805	Hs.80220	catenin (cadherin-associated protein), d
	439239	AI031540	Hs.235331	ESTs
35	444378	R41339	Hs.47860	neurotrophic tyrosine kinase, receptor,
	439415	F05538	Hs.4273	ESTs
	425048	H05468	Hs.164502	ESTs
	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su
	425057	AA826434	Hs.1619	achaete-scute complex (Drosophila) homol
40	425799	T08133	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,
	447359	NM_012093	Hs.18268	adenylate kinase 5
	425842	AI587490	Hs.159623	NK-2 (Drosophila) homolog B
	423853	AB011537	Hs.133466	sirt (Drosophila) homolog 1
	435708	AI362949	Hs.75169	ESTs
45	437268	AI754847	Hs.227571	regulator of G-protein signalling 4
	409395	U46745	Hs.336678	dystrobrevin, alpha
	441285	NM_002374	Hs.167	microtubule-associated protein 2
	422656	AI870435	Hs.1569	LIM homeobox protein 2
	425523	AB007948	Hs.158244	KIAA0479 protein
50	437204	AL110216	Hs.22826	ESTs, Weakly similar to I55214 salivary
	416370	N90470	Hs.203697	ESTs, Weakly similar to I38022 hypoteti
	441497	RS1064	Hs.23172	ESTs
	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11
	408604	D51408	Hs.21925	ESTs
55	413597	AW302885	Hs.117183	ESTs
	422980	N46569	Hs.76722	CCAAT/enhancer binding protein (C/EBP),
	428392	H10233	Hs.2265	secretory granule, neuroendocrine protei
	429466	M85835	Hs.12827	ESTs
	448302	AI480208	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,
60	439199	R40373	Hs.26299	ESTs
	448743	AB032962	Hs.21896	KIAA1136 protein
	418338	NM_002522	Hs.84154	neuronal pentraxin I
	444513	AL120214	Hs.7117	glutamate receptor, ionotropic, AMPA 1
	444783	AK001468	Hs.62180	anillin (Drosophila Scrap homolog), act
65	447004	AW296968	Hs.157539	ESTs
	425984	AW836277	Hs.165636	hypothetical protein DKFZp761C07121
	448672	AI955511	Hs.225106	ESTs
	452372	AI885742	Hs.228474	ESTs
	424120	T80579	Hs.290270	ESTs
70	424581	M62062	Hs.150917	catenin (cadherin-associated protein), a
	424790	AL119344	Hs.13326	ESTs, Weakly similar to 2004399A chromos
	426269	H15302	Hs.168950	Homo sapiens mRNA; cDNA DKFZp556A1046 (I
	446692	Z44514		Homo sapiens mRNA for KIAA1763 protein,
	453642	AI370936	Hs.34074	dipeptidylpeptidase VI
75	429037	X81895	Hs.194765	H.sapiens GENX-5624 mRNA, 3' UTR
	441440	AI807981	Hs.30495	ESTs
	429927	NM_001115	Hs.2522	adenylate cyclase 8 (brain)
	415849	R20529	Hs.6806	ESTs
	418110	R43523	Hs.217754	hypothetical protein FLJ22202
80	434277	X77748	Hs.3786	glutamate receptor, metabotropic 3
	409638	AW450420	Hs.21335	ESTs
	441350	AB020690	Hs.7782	paraneoplastic antigen MA2
	415734	NM_014747	Hs.78748	KIAA0237 gene product
				R1
				67.6
				58.2
				53.8
				50.6
				48.3
				44.3
				44.2
				43.8
				40.8
				40.1
				38.8
				36.8
				34.9
				34.4
				34.2
				33.9
				33.8
				32.8
				32.8
				31.3
				30.3
				28.8
				28.2
				27.9
				27.1
				26.2
				25.5
				25.3
				24.0
				23.5
				23.5
				23.2
				23.2
				22.9
				21.6
				21.1
				20.4
				20.0
				19.7
				19.5
				19.4
				19.3
				19.1
				18.9
				18.8
				18.8
				18.6
				18.2
				18.2
				17.4
				17.4
				17.3
				17.2
				17.1
				16.8
				16.5
				16.1
				15.8
				15.7
				15.6
				15.4
				15.2
				15.2
				14.9
				14.7
				14.6
				14.6
				14.4
				14.2
				14.0
				14.0
				13.9
				13.7

	424945	AI221919		hypothetical protein FLJ10582	13.6
	426344	H41821	Hs.322469	transcriptional activator of the c-fos p	13.4
	446372	AB020644	Hs.14945	long fatty acyl-CoA synthetase 2 gene	13.3
5	429946	R49390	Hs.254129	KIAA1678	13.3
	444119	R41231	Hs.184261	ESTs, Weakly similar to T26688 hypotheti	13.3
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	13.2
	415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	13.2
	412266	N59006	Hs.26133	ESTs	13.2
10	436878	BE465204	Hs.47448	ESTs	13.1
	428536	AI143139	Hs.2288	visinin-like 1	13.1
	425649	U30930	Hs.158540	UDP glycosyltransferase 8 (UDP-galactose	13.1
	428982	NM_005097	Hs.194704	leucine-rich, glioma (inactivated) 1	13.0
	437948	AA772920	Hs.303527	ESTs	13.0
	444124	R43097	Hs.6818	ESTs	12.9
15	428342	AI739168		Homo sapiens cDNA FLJ13458 fs, clone PL	12.7
	419249	X14767	Hs.89768	gamma-aminobutyric acid (GABA) A recepto	12.7
	412959	D87458	Hs.75090	KIAA0282 protein	12.6
	419863	AW952691	Hs.93485	Homo sapiens mRNA; cDNA DKFZp761D191 (fr	12.6
20	431467	N71831	Hs.256398	Homo sapiens mRNA; cDNA DKFZp434E0528 (f	12.6
	431019	NM_005249	Hs.2714	forkhead box G1B	12.4
	420547	AF155140	Hs.98738	gonadotropin-regulated testicular RNA he	12.4
	430091	AB032958	Hs.233023	KIAA1132 protein	12.4
	448595	AB014544	Hs.21572	KIAA0644 gene product	12.2
	447342	AI199268	Hs.19322	Homo sapiens, similar to RIKEN cDNA 2010	12.2
25	409049	AI423132	Hs.146343	ESTs	12.0
	421264	AL039123	Hs.103042	microtubule-associated protein 1B	11.9
	451952	AL120173	Hs.301663	ESTs	11.9
	411305	BE241596	Hs.69547	myelin basic protein	11.8
30	433551	AI985544	Hs.12450	protocadherin 9	11.6
	431988	AC002302	Hs.77202	protein kinase C, beta 1	11.6
	415170	R44386	Hs.164578	ESTs	11.5
	408562	AI436323	Hs.31141	Homo sapiens mRNA for KIAA1568 protein,	11.4
	435501	AW051819	Hs.129908	KIAA0591 protein	11.4
35	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	11.1
	423419	R55336	Hs.23539	ESTs	11.1
	424432	AB037821	Hs.146858	protocadherin 10	10.9
	433896	AW294729	Hs.274461	ESTs	10.9
	415293	R49462	Hs.106541	ESTs	10.9
40	447101	N72185	Hs.44189	ESTs	10.9
	440105	AA694010	Hs.6932	Homo sapiens clone 23809 mRNA sequence	10.9
	438054	AA776626	Hs.169309	ESTs	10.8
	433597	AA708205	Hs.100343	ESTs	10.7
	421659	NM_014459	Hs.106511	protocadherin 17	10.6
45	445102	AW204610	Hs.22270	ESTs	10.6
	425154	NM_001851	Hs.154850	collagen, type IX, alpha 1	10.6
	451625	R56793	Hs.106576	alanine-glyoxylate aminotransferase 2-li	10.6
	435191	R15912	Hs.4817	Homo sapiens clone 24461 mRNA sequence	10.6
	450154	R15891	Hs.281587	Human (clone CTG-A4) mRNA sequence	10.5
50	407886	AW969688	Hs.100826	ESTs	10.4
	420345	AW295230	Hs.25231	ESTs	10.4
	428728	NM_016625	Hs.191381	hypothetical protein	10.3
	424997	AL138167	Hs.96920	ESTs	10.3
	440184	AB002297	Hs.7022	dedicator of cyto-kinesis 3	10.2
55	419078	M93119	Hs.89584	insulinoma-associated 1	10.2
	445495	BE622641	Hs.38489	ESTs, Weakly similar to I38022 hypotheti	10.1
	416857	AA188775	Hs.292453	ESTs	10.0
	445041	T64183	Hs.282982	solute carrier	10.0
	419271	N34901	Hs.238532	ESTs	9.8
60	446711	AF169692	Hs.12450	protocadherin 9	9.8
	426847	S78723	Hs.288623	5-hydroxytryptamine (serotonin) receptor	9.7
	427304	AA761526	Hs.163853	ESTs	9.7
	418097	R45137	Hs.21868	ESTs	9.7
	449300	AI656959	Hs.346514	ESTs	9.7
65	419985	H66373	Hs.5856	ESTs, Highly similar to BA393J16.3 [H.sa	9.7
	443785	AW449952	Hs.190125	basic-helix-loop-helix-PAS protein	9.5
	415486	H12214	Hs.13284	ESTs, Weakly similar to 2109260A B cell	9.5
	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	9.5
	438209	AL120659	Hs.6111	aryl-hydrocarbon receptor nuclear transi	9.4
70	424028	AF055084	Hs.153692	Homo sapiens cDNA FLJ14354 fs, clone Y7	9.4
	419683	AA248897	Hs.48784	ESTs	9.4
	414175	AI308876	Hs.103849	hypothetical protein DKFZp761D112	9.2
	400292	AA250737	Hs.72472	BMP-R1B	9.2
	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKFZp564N1682 (f	9.2
	454048	H05626	Hs.6921	ESTs	9.2
75	454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	9.1
	441016	AW138653	Hs.25845	ESTs	9.0
	425187	AW014486	Hs.22509	ESTs	9.0
	445568	H00918	Hs.258744	KIAA1796 protein	8.9
	453941	U39817	Hs.36820	Bloom syndrome	8.9
80	422411	AW749443	Hs.22511	ESTs	8.8
	447350	AI375572	Hs.172634	ESTs	8.8
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	8.7
	448902	Z45998	Hs.22543	Homo sapiens mRNA; cDNA DKFZp76111912 (f	8.7



	448986	H42169	Hs.347310	hypothetical protein FLJ14627	8.6
	423135	N67655	Hs.26411	ESTs	8.5
	418030	BE207573	Hs.83321	neuromedin B	8.4
5	448769	N66037	Hs.38173	ESTs	8.4
	407748	AL079409	Hs.38176	KIAA0606 protein; SCN Circadian Oscillat	8.3
	400293	N51002	Hs.306480	Homo sapiens mRNA; cDNA DKFZp761E2112 (f	8.3
	415279	F04237	Hs.1447	glial fibrillary acidic protein	8.2
	451516	A0800515	Hs.12024	ESTs	8.2
10	419629	AB020695	Hs.91662	KIAA0888 protein	8.2
	437034	AA742643		gb:ny91c01.s1 NCI_CGAP_GC81 Homo sapiens	8.2
	456955	AW131888	Hs.172792	ESTs, Weakly similar to hypothetical pro	8.1
	417417	F05745	Hs.89512	ATPase, Ca transporting, plasma membrane	8.1
	452279	AA266844	Hs.61260	hypothetical protein FLJ13164	8.1
15	422864	AA318323	Hs.12827	gb:EST20390 Retina II Homo sapiens cDNA	8.1
	452526	W38537	Hs.280740	hypothetical protein MGC3040	8.0
	435793	AB037734	Hs.4993	KIAA1313 protein	7.9
	415669	NM_005025	Hs.78589	serine (or cysteine) proteinase inhibitor	7.9
	407168	R45175	Hs.117183	ESTs	7.9
20	447414	D82343	Hs.74376	neuroblastoma (nerve tissue) protein	7.8
	442710	AJ015631	Hs.23210	ESTs	7.8
	416836	D54745	Hs.80247	cholecystokinin	7.8
	419721	NM_001650	Hs.288550	aquaporin 4	7.7
	436080	AA777381	Hs.291530	ESTs, Weakly similar to ALUC_HUMAN !!!!	7.7
25	436109	AA922153	Hs.132760	hypothetical protein MGC15729	7.7
	428845	AL157579	Hs.153610	KIAA0751 gene product	7.7
	448321	NM_005883	Hs.20912	adenomatous polyposis coli like	7.7
	410305	AF030409	Hs.62185	solute carrier family 9 (sodium/hydrogen	7.6
	443392	AJ055821	Hs.293420	ESTs	7.6
30	429038	AL023513	Hs.194766	seizure related gene 6 (mouse)-like	7.5
	418738	AW388633	Hs.6682	solute carrier family 7, (cationic amino	7.5
	423361	AW170055	Hs.47628	ESTs	7.5
	447198	D81523	Hs.283435	ESTs	7.5
	448555	AJ536697	Hs.159863	ESTs	7.5
35	458332	AJ000341	Hs.220491	ESTs	7.4
	407034	U84540		gb:Human dystrobrein isoform DTN-3 (DTN	7.4
	425354	U62027	Hs.155935	complement component 3a receptor 1	7.4
	426814	AF036943	Hs.172619	myelin transcription factor 1-like	7.4
	448507	AL133109	Hs.21333	Homo sapiens mRNA; cDNA DKFZp566N1047 (f	7.4
40	439845	AL355743	Hs.56663	Homo sapiens EST from clone 41214, full	7.4
	449078	AK001256	Hs.22975	KIAA1576 protein	7.3
	410102	AW248508	Hs.279727	ESTs; homologue of PEM-3 (Ciona savignyi	7.2
	425741	AF052152	Hs.159412	Homo sapiens clone 24628 mRNA sequence	7.2
	440210	AW674562	Hs.125296	ESTs	7.2
45	415651	AJ207162	Hs.3815	slathmin-like-protein RB3	7.2
	428409	AW117207	Hs.88523	ESTs	7.1
	413409	AJ638418	Hs.1440	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	7.1
	443992	AW022228	Hs.322922	ESTs	7.1
	455601	AJ368680	Hs.816	SRY (sex determining region Y)-box 2	7.1
50	427540	R12014	Hs.20976	ESTs	7.0
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	7.0
	424893	AW295112	Hs.153648	Homo sapiens cDNA FLJ13303 fs, clone OV	7.0
	452355	N54926	Hs.29202	G protein-coupled receptor 34	7.0
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	7.0
55	440152	AB002376	Hs.7006	KIAA0378 protein	7.0
	454293	H49739	Hs.134013	ESTs, Moderately similar to HK61_HUMAN H	7.0
	425782	U86468	Hs.159525	cell growth regulatory with EF-hand doma	7.0
	416805	F13271	Hs.79981	Human clone 23560 mRNA sequence	7.0
	419991	AJ000098	Hs.94210	eyes absent (Drosophila) homolog 1	7.0
60	424343	AW856360	Hs.4748	adenylate cyclase activating polypeptide	6.9
	408369	R38438	Hs.182575	solute carrier family 15 (H777) transport	6.9
	449605	AW138581	Hs.198416	ESTs	6.9
	444396	T65213	Hs.4257	ESTs	6.9
	444165	AL137443	Hs.10441	hypothetical protein FLJ11236	6.9
65	414245	BE148072	Hs.75850	WAS protein family, member 1	6.9
	412155	R38167	Hs.12449	Homo sapiens transmembrane protein HTMP1	6.9
	424624	AB032947	Hs.151301	Ca2+-dependent activator protein for secr	6.9
	448681	AL109781	Hs.21754	Homo sapiens mRNA full length insert cDN	6.9
	411379	AJ816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	6.9
70	446782	AJ653048	Hs.144006	ESTs	6.8
	426919	AL041228		ELAV (embryonic lethal, abnormal vision,	6.8
	423346	AJ267677	Hs.127416	synaptojanin 1	6.8
	436643	AA757626	Hs.10941	ESTs, Weakly similar to IPP1_HUMAN PROTE	6.8
	414922	D00723	Hs.77631	glycine cleavage system protein H (amino	6.8
75	410037	AB020725	Hs.58009	KIAA0918 protein	6.8
	442613	AJ004002	Hs.130522	Kv channel-interacting protein 1	6.8
	413589	AW452631	Hs.313803	ESTs, Highly similar to AF157833 1 noncl	6.8
	422175	N79885	Hs.6382	ESTs, Highly similar to T00391 hypotheti	6.8
	421141	AW117261	Hs.125914	ESTs	6.7
80	452786	R61362	Hs.106642	ESTs, Weakly similar to T09052 hypotheti	6.7
	441916	AA993571	Hs.129075	ESTs	6.7
	448533	AL119710	Hs.21365	nucleosome assembly protein 1-like 3	6.7
	428037	H47474	Hs.89230	potassium intermediate/small conductance	6.7
	423343	AA324643	Hs.246106	ESTs	6.7

	456723	Z43902	Hs.4748	adenylate cyclase activating polypeptide	6.7
	414214	D49558	Hs.75819	glycoprotein M6A	6.7
	434811	AW971205	Hs.114280	ESTs	6.7
	424922	BE386547	Hs.217112	hypothetical protein MGC10825	6.7
5	449328	AJ962493	Hs.345303	ESTs	6.6
	431553	X78075	Hs.2799	cartilage linking protein 1	6.6
	420156	AW449258	Hs.6187	ESTs	6.6
	431117	AF003522	Hs.250500	delta (Drosophila)-like 1	6.6
	422960	AW890487	Hs.63984	cadherin 13, H-cadherin (heart)	6.6
10	429239	AA448419	Hs.45209	ESTs	6.5
	453924	R49295	Hs.24886	ESTs	6.5
	433929	AJ375499	Hs.27379	ESTs	6.5
	426529	AF090100	Hs.170241	Homo sapiens clone IMAGE 23915	6.5
	414683	S78295	Hs.76888	hypothetical protein MGC12702	6.4
15	409746	NM_004794	Hs.56294	RAB33A, member RAS oncogene family	6.4
	419169	AW851980	Hs.262346	ESTs, Weakly similar to S72482 hypotheti	6.4
	453590	AF150278	Hs.33578	KIAA0820 protein	6.4
	422263	AA307839	Hs.129908	KIAA0591 protein	6.4
	421688	AK000307	Hs.106825	hypothetical protein FLJ20300	6.4
20	447197	R36075	gb:yh88b01.s1 Soares placenta Nb2HP Homo	6.3	
	425588	F07396	Hs.46627	ESTs	6.3
	410366	AI267589	Hs.302689	hypothetical protein	6.3
	419498	AL036591	Hs.20887	hypothetical protein FLJ10392	6.3
25	446997	AA383439	Hs.16758	Spir-1 protein	6.3
	427958	AA418000	Hs.98280	potassium intermediate/small conductance	6.3
	445908	R13580	Hs.13436	Homo sapiens clone 24425 mRNA sequence	6.3
	412068	S72043	Hs.73133	metallothionein 3 (growth inhibitory fac	6.3
	452834	AI638827	Hs.105685	KIAA1688 protein	6.3
30	408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	6.3
	418512	AW498974		diacylglycerol kinase, zeta (104kD)	6.2
	410099	AA081630		KIAA0036 gene product	6.2
	452744	AI267652	Hs.246107	Homo sapiens mRNA: cDNA DKFZp434E082 (tr	6.2
	427897	NM_017413	Hs.303084	apelin; peptide ligand for APJ receptor	6.2
35	416427	BE244050	Hs.79307	Rac/Cdc42 guanine exchange factor (GEF)	6.2
	439274	AF086092	Hs.48372	ESTs	6.2
	431552	AJ815863	Hs.259873	axonal transport of synaptic vesicles	6.2
	439607	BE540565	Hs.159460	ESTs	6.2
	408950	AA707814	Hs.14945	long fatty acyl-CoA synthetase 2 gene	6.2
40	412709	AL022327	Hs.74518	KIAA0027 protein	6.2
	435624	AF218942	Hs.24889	formin 2	6.1
	425977	R15138	Hs.165570	Homo sapiens clone 25052 mRNA sequence	6.1
	420077	AW512260	Hs.87767	ESTs	6.1
	457005	AJ007421	Hs.172597	sal (Drosophila)-like 3	6.1
45	440471	AA886146	Hs.307944	ESTs	6.1
	423770	AW976766	Hs.132776	Homo sapiens cDNA FLJ10077 fs, clone HE	6.1
	438624	AA889055	Hs.123468	ESTs	6.1
	452752	AW044058	Hs.33578	KIAA0820 protein	6.1
	438208	AL041224	Hs.65379	ESTs	6.1
50	416072	AL110370	Hs.79000	growth associated protein 43	6.1
	407808	AA663559	Hs.279789	histone deacetylase 3	6.1
	433701	AW445023	Hs.15155	ESTs	6.1
	419704	AA429104	Hs.45057	ESTs	6.1
	429250	H56585	Hs.198308	tryptophan rich basic protein	6.1
55	433244	AB040943	Hs.271285	KIAA1510 protein	6.0
	422544	AB018259	Hs.118140	KIAA0716 gene product	6.0
	420133	AA426117	Hs.155543	ESTs	6.0
	440491	R35252	Hs.130558	ESTs, Weakly similar to 2109260A B cell	6.0
	422728	AW937826	Hs.103262	ESTs, Weakly similar to ZN91_HUMAN ZINC	6.0
60	415257	F03016	Hs.27513	ESTs	5.9
	417160	N76497	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	5.9
	430188	AL049242	Hs.234794	Homo sapiens mRNA: cDNA DKFZp564B083 (tr	5.9
	437372	AA323968	Hs.283631	hypothetical protein DKFZp547G183	5.9
	430471	AF064845	Hs.241523	hypothetical protein FLJ10142	5.9
65	433523	H29882		ESTs	5.9
	408926	AF217525	Hs.49002	Down syndrome cell adhesion molecule	5.9
	427317	AB028955	Hs.175780	KIAA1032 protein	5.9
	426140	AF131798	Hs.343768	Homo sapiens clone 25119 mRNA sequence	5.9
	409892	AW956113	Hs.7149	gb:EST368183 MAGE resequences, MAGD Homo	5.8
70	459516	AJ049662	Hs.246858	EST	5.8
	442910	AJ385130	Hs.11307	ESTs, Weakly similar to T19326 hypotheti	5.8
	414737	AJ160386	Hs.125087	ESTs	5.8
	424332	AA338919	Hs.101615	ESTs	5.8
	403142			NM_002706*:Homo sapiens protein phosphat	5.8
75	420111	AA255652		gb:zs21h11.1 NCI_CGAP_GCB1 Homo sapiens	5.8
	450813	AJ739625	Hs.203376	ESTs	5.8
	402145			Target Exon	5.8
	434792	AA649253	Hs.132458	ESTs	5.8
	422421	AA325138	Hs.235873	hypothetical protein FLJ22672	5.8
80	445745	AB007924	Hs.13245	KIAA0455 gene product	5.8
	420608	BE548277	Hs.103104	ESTs	5.8
	451407	AA131376	Hs.343809	fibroblast growth factor 128	5.7
	441102	AA973905		intermediate filament protein syncoilin	5.7
	424560	AA158727	Hs.150555	protein predicted by clone 23733	5.7

5	430287	AW182459	Hs.125759	ESTs, Weakly similar to LEU5_HUMAN LEUKE	5.7
	405238			Target Exon	5.7
	432890	NM_014442	Hs.279751	sialic acid binding Ig-like lectin 8	5.7
	440492	R39127	Hs.21433	hypothetical protein DKFZp547J036	5.7
	413492	O87470	Hs.75400	KIAA0280 protein	5.7
10	427624	AA406245	Hs.24895	ESTs	5.6
	418079	R40058	Hs.6911	ESTs	5.6
	424458	M29273	Hs.1780	myelin associated glycoprotein	5.6
	448299	AA497044	Hs.20887	hypothetical protein FLJ10392	5.6
	429688	AI685086	Hs.26339	ESTs, Weakly similar to S21348 probable	5.6
15	430228	AW950939	Hs.6382	ESTs, Highly similar to T00391 hypothe	5.6
	445255	NM_014841	Hs.12477	synaptosomal-associated protein, 91 kDa	5.6
	436887	AW953157	Hs.193235	hypothetical protein DKFZp547D155	5.6
	452898	AA814497	Hs.78792	ESTs	5.6
	435538	AB011540	Hs.4930	low density lipoprotein receptor-related	5.5
20	436035	AA703679	Hs.106999	ESTs, Weakly similar to SYT5_HUMAN SYNAP	5.5
	412190	R16180	Hs.274461	ESTs	5.5
	459278	AW294659	Hs.34054	Homo sapiens cDNA: FLJ22488 fs, clone H	5.5
	416490	AF090116	Hs.79348	regulator of G-protein signalling 7	5.5
	423449	AA979900	Hs.33067	ESTs	5.5
25	440866	AI703103	Hs.271360	hypothetical protein MGC16275	5.5
	432154	AI701523	Hs.112577	ESTs	5.4
	423476	AL035633		Human DNA sequence from clone RPS-1046G1	5.4
	428588	F12101	Hs.185701	Homo sapiens mRNA full length insert cDN	5.4
	447773	AI423930	Hs.36790	ESTs, Weakly similar to putative p150 [H	5.4
30	436936	AL134451	Hs.197478	ESTs	5.4
	427250	R35941	Hs.25418	ESTs	5.4
	427302	AA400540	Hs.135282	Homo sapiens cDNA FLJ11554 fs, clone HE	5.4
	452856	AF034799	Hs.30881	protein tyrosine phosphatase, receptor t	5.4
	428795	R45503	Hs.97469	ESTs, Highly similar to A39769 N-acetyl	5.4
35	407385	AA610150	Hs.272072	ESTs, Weakly similar to I38022 hypothe	5.4
	405348			C7001664:gi12698061 dbj BAB21849.1  (AB	5.3
	438330	AW450572	Hs.257318	ESTs	5.3
	426503	AA380153		gb:EST93093 Skin tumor I Homo sapiens cD	5.3
	448148	NM_016578	Hs.20509	HBV pX associated protein-8	5.3
40	410386	W26187	Hs.3327	Homo sapiens cDNA: FLJ22219 fs, clone H	5.3
	445225	AI216555	Hs.202398	ESTs	5.3
	428784	Y12851	Hs.193470	purinergic receptor P2X, ligand-gated io	5.3
	418759	AA227879	Hs.187621	ESTs	5.3
	402605			Target Exon	5.3
45	412046	Y07847	Hs.73088	RAS-related on chromosome 22	5.2
	423869	BE409301	Hs.134012	C1q-related factor	5.2
	430130	AL137311	Hs.234074	Homo sapiens mRNA: cDNA DKFZp761G02121 (	5.2
	453096	AW294631	Hs.11325	ESTs	5.2
	450475	AW805634	Hs.205015	ESTs	5.2
50	429139	F09092	Hs.65087	ESTs	5.2
	451783	R42554	Hs.210862	T-box, brain, 1	5.2
	436568	H12049	Hs.91564	ESTs	5.2
	424330	AW073953	Hs.333396	Homo sapiens cDNA FLJ13596 fs, clone PL	5.2
	408453	AI369838	Hs.45127	chondroitin sulfate proteoglycan 5 (neur	5.2
55	447499	AW262580	Hs.147674	protocadherin beta 16	5.2
	402855			NM_001839: Homo sapiens calponin 3, acid	5.2
	420805	L10333	Hs.99347	reticulon 1	5.2
	426457	AW894667	Hs.169965	chimerin (chimaerin) 1	5.2
	417355	D13168	Hs.82002	endothelin receptor type B	5.1
60	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	5.1
	450639	AI703188	Hs.277174	ESTs	5.1
	412811	H06382		ESTs	5.1
	400379	NM_018432		Homo sapiens ovarian cancer related prot	5.1
	441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	5.1
65	442832	AW206560	Hs.253569	ESTs	5.1
	422709	AA315331	Hs.153485	ESTs	5.1
	411555	AF113537	Hs.70669	HMP19 protein	5.1
	419043	T19167	Hs.89566	ets variant gene 1	5.0
	430979	AI479755	Hs.129010	ESTs	5.0
70	451320	AW118072		diacylglycerol kinase, zeta (104kD)	5.0
	423678	AW963357	Hs.7847	ESTs	5.0
	429918	AW873986	Hs.119383	ESTs	5.0
	452785	AL359942	Hs.296434	erythroid differentiation and demucosa	5.0
	453128	AW026516	Hs.31791	acylphosphatase 2, muscle type	5.0
75	428001	H97428	Hs.219907	ESTs, Moderately similar to Transforming	5.0
	430183	BE010038		gb:PM3-BN0176-100400-001-g04 BN0176 Homo	5.0
	449969	AW295142	Hs.180187	Homo sapiens cDNA FLJ14337 fs, clone PL	5.0
	439108	AW163034	Hs.6467	synaptogyrin 3	5.0
	426271	AF026547	Hs.169047	chondroitin sulfate proteoglycan 3 (neur	5.0
80	451752	AB032997	Hs.26966	KIAA1171 protein	5.0
	420578	AA813546	Hs.99034	GTP-binding protein Rho7	4.9
	427315	AA179949	Hs.175563	Homo sapiens mRNA: cDNA DKFZp564N0763 (f	4.9
	428186	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	4.9
	445133	AW157646	Hs.198689	ESTs	4.9
	410359	R38624	Hs.106313	ESTs	4.9
	427144	X95097	Hs.2126	vasoactive intestinal peptide receptor 2	4.9
	448548	R13209	Hs.21413	solute carrier family 12, (potassium-chi	4.9

	457561	AA331517	Hs.286055	chimerin (chimaerin) 2	4.9
	409100	H98216	Hs.42245	ESTs, Moderately similar to I38022 hypot	4.9
	437117	AL049256	Hs.122593	ESTs	4.9
5	415101	R45531	Hs.144534	ESTs	4.9
	438458	AW975186		gb:EST387294 MAGE resequences, MAGN Homo	4.9
	442026	AJ243749	Hs.8074	brain-specific angiogenesis inhibitor 3	4.9
	438283	AI458931	Hs.37282	ESTs	4.9
	449714	AB033015	Hs.23941	KIAA1189 protein	4.9
10	420871	AA702972	Hs.65300	ESTs	4.9
	425256	BE297611	Hs.155392	collapsin response mediator protein 1	4.9
	424001	W67883	Hs.137476	paternally expressed 10	4.9
	419103	Z40229	Hs.96423	hypothetical protein FLJ23033	4.8
	446727	AB011095	Hs.16032	KIAA0523 protein	4.8
15	408670	AF160967	Hs.48784	potassium large conductance calcium-acti	4.8
	426189	AA424030	Hs.45627	ESTs	4.8
	420092	AA814043	Hs.88045	ESTs	4.8
	410631	AA086469	Hs.47171	ESTs	4.8
	443277	AA001064	Hs.43670	ESTs	4.8
20	436282	R91913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	4.8
	414705	AW340125	Hs.76989	KIAA0097 gene product	4.8
	438703	AI803373	Hs.31599	ESTs	4.8
	439340	AB032436	Hs.6535	brain-specific Na-dependent inorganic ph	4.8
	445890	AF055019	Hs.21906	Homo sapiens clone 24670 mRNA sequence	4.7
25	438734	AI937612	Hs.273758	hypothetical protein FLJ23112	4.7
	408177	AI241733	Hs.43871	ESTs	4.7
	445740	T78281	Hs.13226	Homo sapiens clone 25181 mRNA sequence	4.7
	459527	AW977558	Hs.291735	ESTs, Weakly similar to I78885 serine/th	4.7
	445523	Z30118	Hs.293788	ESTs, Moderately similar to unnamed prot	4.7
	409172	Z99399	Hs.122593	ESTs	4.7
30	437748	AF234882	Hs.5814	suppression of tumorigenicity 7	4.7
	421637	AF035290	Hs.106300	Homo sapiens clone 23556 mRNA sequence	4.7
	448044	AI458682		gb:U13601.x1 NCI_CGAP_Lu24 Homo sapiens	4.7
	459311	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	4.7
35	447891	R41754	Hs.6496	ESTs	4.7
	426969	U07618	Hs.173034	amphiphysin (Stiff-Mann syndrome with br	4.7
	404819			NM_002688":Homo sapiens peanut (Drosophi	4.7
	409125	R17268	Hs.343567	axonal transport of synaptic vesicles	4.7
	437762	T78028	Hs.154679	synaptotagmin I	4.7
40	441668	AI811973	Hs.136313	ESTs	4.7
	444190	AI878918	Hs.10526	cysteine and glycine-rich protein 2	4.6
	429269	AA449013	Hs.99203	ESTs	4.6
	433009	AA761668		gb:nz24c08.s1 NCI_CGAP_GC81 Homo sapiens	4.6
	416586	D44643	Hs.14144	secreted modular calcium-binding protein	4.6
45	427701	AA411101	Hs.243886	nuclear autoantigenic sperm protein (his	4.6
	426925	NM_001196	Hs.315689	Homo sapiens cDNA: FLJ22373 fs, clone H	4.6
	410264	AK001853	Hs.61508	Homo sapiens cDNA FLJ10991 fs, clone PL	4.6
	437698	R61837	Hs.7990	ESTs, Moderately similar to I84505 calci	4.6
	445813	Z42023	Hs.106576	alanine-glyoxylate aminotransferase 2-II	4.6
50	424264	D80400	Hs.239388	Human DNA sequence from clone RP1-304B14	4.6
	448765	R15337	Hs.21958	Homo sapiens mRNA: cDNA DKFZp547D086 (fr	4.6
	419723	AL120193	Hs.339810	longevity assurance (LAG1, S. cerevisiae	4.6
	424282	R76421	Hs.135694	ESTs	4.6
	429401	AW296102	Hs.99272	ESTs, Weakly similar to S32567 A4 protei	4.6
55	426413	AA377823		gb:EST90805 Synovial sarcoma Homo sapien	4.5
	407896	D76435	Hs.41154	Zic family member 1 (odd-paired Drosophi	4.5
	413248	T64858	Hs.21433	hypothetical protein DKFZp547J036	4.5
	443731	AI083928	Hs.145418	ESTs	4.5
	449539	W80363	Hs.58446	ESTs	4.5
60	420362	U79734	Hs.97206	huntingtin interacting protein 1	4.5
	443301	AI733614	Hs.220587	ESTs, Moderately similar to ALU5_HUMAN A	4.5
	423178	AI033140	Hs.124983	Homo sapiens mRNA: cDNA DKFZp564C142 (fr	4.5
	437933	AI276132	Hs.146155	ESTs	4.5
	446544	AI631932	Hs.7047	ESTs, Weakly similar to Unknown [H.sapie	4.5
65	411642	NM_014932	Hs.71132	neurexin 1	4.5
	428282	N34905	Hs.44653	Homo sapiens cDNA: FLJ22669 fs, clone H	4.5
	411498	NM_014210	Hs.70499	ecotropic viral integration site 2A	4.5
	408622	AA056060	Hs.202577	Homo sapiens cDNA FLJ12165 fs, clone MA	4.5
	436637	AI783529	Hs.26766	ESTs	4.5
70	438456	AA913381	Hs.20594	ESTs	4.5
	400533			ENSP00000209376":PRE065 protein (Fragmen	4.4
	413951	AW051200	Hs.75640	natriferetic peptide precursor A	4.4
	417632	R20855	Hs.5422	glycoprotein M6B	4.4
	425138	H08849	Hs.167464	glutamate receptor, ionotropic, N-methyl	4.4
75	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	4.4
	413812	AW188687	Hs.44748	ESTs	4.4
	448451	AW015994	Hs.345433	gb:U1-H-B10p-abh-g-09-0-U1.s1 NCI_CGAP_S	4.4
	432281	AK001239	Hs.274263	hypothetical protein FLJ10377	4.4
	458760	AI496631	Hs.111334	ferritin, light polypeptide	4.4
80	405819			NM_002578:Homo sapiens p21 (CDKN1A)-acti	4.4
	447877	AI435184	Hs.164252	ESTs	4.4
	431342	AW971018	Hs.21659	ESTs	4.4
	408577	H50572	Hs.19515	ESTs, Highly similar to NRG3_HUMAN PRO-N	4.4
	445729	H21066	Hs.13223	Homo sapiens mRNA full length insert cDN	4.4

	422253	W81526	Hs.118329	ESTs, Moderately similar to GAD_HUMAN GA	4.4
	419088	AI538323	Hs.52620	integrin, beta 8	4.4
	428305	AA446828	Hs.2799	cartilage linking protein 1	4.4
5	410768	AF038185	Hs.66187	Homo sapiens clone 23700 mRNA sequence	4.4
	428722	U76456	Hs.190787	tissue inhibitor of metalloproteinase 4	4.4
	451621	AI879148	Hs.26770	fatty acid binding protein 7, brain	4.4
	424240	AB023185	Hs.143535	calcium/calmodulin-dependent protein kin	4.3
	433932	AW954599	Hs.169330	neuronal protein	4.3
10	439935	S75105	Hs.8358	glutamate receptor, ionotropic, kainate	4.3
	436039	AW023323	Hs.121070	ESTs	4.3
	416220	N49776	Hs.170994	hypothetical protein MGC10946	4.3
	409953	AA332277	Hs.57691	cadherin 18, type 2	4.3
	456497	AW967956	Hs.123648	ESTs, Weakly similar to AF108460 1 ubinu	4.3
15	420352	BE258835		gb:601117374F1 NIH_MGC_16 Homo sapiens c	4.3
	454032	W31790	Hs.194293	ESTs, Weakly similar to I54374 gene NF2	4.3
	421790	AW896201	Hs.22654	sodium channel, voltage-gated, type I, a	4.3
	444218	AF070641	Hs.10684	Homo sapiens clone 24421 mRNA sequence	4.3
	436391	AJ227892	Hs.146274	ESTs	4.3
20	452106	AI141031	Hs.21342	ESTs	4.3
	422465	AF073710	Hs.117149	regulator of G-protein signaling 9	4.3
	439285	AL133916		hypothetical protein FLJ20093	4.3
	404541			NM_030795:Homo sapiens statmin-like 4 (	4.3
	424572	M19650		Z'-cyclic nucleotide 3' phosphodiester	4.3
25	449048	Z45051	Hs.22920	similar to S68401 (cattle) glucose induc	4.3
	409182	AA064970	Hs.122593	ESTs	4.3
	444600	R41398	Hs.6996	ESTs	4.3
	408838	AI669535	Hs.40369	ESTs	4.3
	410592	R94088	Hs.43569	ESTs	4.3
30	440168	AA868507	Hs.126141	ESTs	4.2
	445078	AI869975	Hs.4775	junctional protein 3	4.2
	426870	AA431682	Hs.134832	ESTs	4.2
	411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	4.2
	412505	AA974491	Hs.21734	ESTs	4.2
35	418506	AA084248	Hs.85339	G protein-coupled receptor 39	4.2
	441707	R42637	Hs.21963	hypothetical protein DKFZp761B0514	4.2
	449433	AI672096	Hs.9012	ESTs, Weakly similar to S26650 DNA-bind	4.2
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALUF_HUMAN !!!!	4.2
	448243	AW369771	Hs.52620	integrin, beta 8	4.2
40	429149	AW193360	Hs.197962	ESTs, Weakly similar to I38022 hypotheti	4.2
	430676	AF084866		gb:Homo sapiens envelope protein RIC-3 (	4.2
	404584			Target Exon	4.2
	422798	R92347	Hs.34574	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.2
	451254	AI571016	Hs.172967	ESTs	4.2
45	428585	AB007863	Hs.185140	KIAA0403 protein	4.2
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	4.2
	425287	R89249	Hs.155524	peanut (Drosophila)-like 2	4.2
	425790	AW136286	Hs.288446	ESTs	4.2
	450407	NM_000810	Hs.24969	gamma-aminobutyric acid (GABA) A recepto	4.2
50	425241	AA324624	Hs.155247	aldolase C, fructose-bisphosphate	4.2
	445292	AV653264	Hs.13982	Homo sapiens cDNA FLJ14666 fs, clone NT	4.1
	400777			NM_007325:Homo sapiens glutamate recept	4.1
	422170	AI791949	Hs.112432	anti-Müllerian hormone	4.1
	410765	AI694972	Hs.66180	nucleosome assembly protein 1-like 2	4.1
55	425402	AI215881	Hs.24970	ESTs, Weakly similar to B34323 GTP-bind	4.1
	438461	AW075485	Hs.286049	phosphoserine aminotransferase	4.1
	421268	AI126821	Hs.30514	ESTs	4.1
	416439	AA180363	Hs.118769	ESTs	4.1
	419687	AI638859	Hs.227699	ESTs, Weakly similar to T2D3_HUMAN TRANS	4.1
60	435040	AI932350	Hs.152825	ESTs	4.1
	439774	AL360257	Hs.213493	Homo sapiens mRNA full length insert cDN	4.1
	458435	AI187118	Hs.144121	ESTs, Weakly similar to T46916 hypotheti	4.1
	410320	AA084071	Hs.93816	Homo sapiens mRNA; cDNA DKFZp547N093 (fr	4.1
	436899	AA764852	Hs.291567	ESTs	4.1
65	454171	AW854832		gb:QV2-CT0261-201099-011-05 CT0261 Homo	4.1
	453118	AW195849	Hs.252757	ESTs	4.1
	428771	AB028992	Hs.193143	KIAA1069 protein	4.1
	444185	AW298350	Hs.66020	ESTs	4.1
	422374	AW732869	Hs.1519	protein kinase, cAMP-dependent, regulato	4.1
70	430147	R60704	Hs.234434	hair/enhancer-of-split related with YRP	4.1
	456060	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fs, clone MA	4.1
	433819	AW511097	Hs.112765	ESTs	4.1
	415827	HI7462	Hs.23079	ESTs	4.1
	437397	AA349847	Hs.4221	hypothetical protein DKFZp761H039	4.1
75	441390	AI692560	Hs.131175	ESTs	4.1
	440483	AI200836	Hs.150386	ESTs	4.0
	435294	T84084	Hs.196008	Homo sapiens cDNA FLJ11723 fs, clone HE	4.0
	447397	BE247676	Hs.18442	E-1 enzyme	4.0
	425390	AI092634	Hs.156114	protein tyrosine phosphatase, non-recept	4.0
80	432022	AL182042	Hs.272348	Homo sapiens mRNA; cDNA DKFZp761L1212 (f	4.0
	420602	AF060877	Hs.99236	regulator of G-protein signaling 20	4.0
	408081	AW451597	Hs.167409	ESTs	4.0
	453313	BE005771	Hs.153748	hypothetical protein FLJ22490	4.0
	436511	AA721252	Hs.291502	ESTs	4.0

	448944	AB014605	Hs.22599	atrophin-1 interacting protein 1; activi	4.0
	419412	AW181058	Hs.90297	synuclein, beta	4.0
	409091	AW970386	Hs.269423	ESTs	4.0
	453438	AI469935	Hs.22792	ESTs	4.0
5	450582	AI339732		G-rich RNA sequence binding factor 1	4.0
	440553	AA889416	Hs.344043	Homo sapiens cDNA FLJ14459 fis, clone HE	4.0
	437449	AL390153	Hs.208339	Homo sapiens mRNA; cDNA DKFZp762G113 (tr	4.0
	445888	AF070564	Hs.13415	Homo sapiens clone 24571 mRNA sequence	4.0
	439450	RS1613	Hs.125304	ESTs	4.0
10	453792	AL134539	Hs.254129	KIAA1678	4.0
	459080	AW192083	Hs.290855	ESTs	4.0
	438810	AW897846	Hs.6421	hypothetical protein DKFZp761N09121	4.0
	446233	AI282028	Hs.25205	ESTs	4.0
	412754	AW160375	Hs.74565	amyloid beta (A4) precursor-like protein	4.0
15	412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	4.0
	434859	BE255080	Hs.299315	collapsin response mediator protein-5; C	4.0
	423279	AW859861	Hs.290943	ESTs	4.0
	416340	N31772	Hs.79226	fasciculation and elongation protein zet	3.9
	410126	BE169274		KIAA0036 gene product	3.9
20	431173	AW971198	Hs.294068	ESTs	3.9
	446938	H10207	Hs.47314	ESTs	3.9
	424899	AL119387	Hs.119062	ESTs	3.9
	419038	AW134924	Hs.190325	ESTs	3.9
	450530	NM_006668	Hs.25121	cytochrome P450, subfamily 46 (cholester	3.9
25	438142	T90309	Hs.269651	ESTs	3.9
	412659	AW753865	Hs.74376	olfactomedin related ER localized protel	3.9
	412788	AA120960	Hs.198416	ESTs	3.9
	410909	AW898161	Hs.53112	ESTs, Moderately similar to ALU8_HUMAN A	3.9
	429433	AA452899	Hs.213588	ESTs, Weakly similar to KIAA1353 protein	3.9
30	432809	AA565509	Hs.131703	ESTs	3.9
	424186	AI536021	Hs.288706	Homo sapiens cDNA FLJ10281 fis, clone HE	3.9
	425480	AB023198	Hs.158135	KIAA0981 protein	3.9
	449932	AI675444	Hs.263024	ESTs	3.9
	434072	H70854	Hs.283059	Homo sapiens PRO1082 mRNA, complete cds	3.9
35	450590	AI701507	Hs.273740	ESTs	3.9
	419586	AI088485	Hs.144759	ESTs, Weakly similar to t38022 hypotheti	3.9
	414040	N58513	Hs.32171	ESTs	3.9
	436480	AJ271643	Hs.87469	putative acid-sensing ion channel	3.9
	443210	AI692649	Hs.9451	hypothetical protein MGC13168	3.9
40	448448	NM_014954	Hs.21239	KIAA0985 protein	3.9
	447067	R42098	Hs.21964	ESTs	3.9
	413199	M62843	Hs.75236	ELAV (embryonic lethal, abnormal vision,	3.9
	429421	AL031658		Human DNA sequence from clone RP1-310013	3.9
	415796	R87548	Hs.78854	ATPase, Na <sup>+</sup> transporting, beta 2 polypep	3.8
45	417333	AL157545	Hs.173179	bromodomain and PHD finger containing, 3	3.8
	418771	AA807881	Hs.25329	ESTs	3.8
	417563	AI203405	Hs.47831	ESTs	3.8
	412420	AL035668	Hs.73853	bone morphogenetic protein 2	3.8
	450202	AW969756	Hs.34145	ESTs, Weakly similar to B49847 GTP-bindi	3.8
50	435312	AJ243398	Hs.4865	voltage-gated sodium channel beta-3 subu	3.8
	435832	AA425688	Hs.41641	Bruno (Drosophila)-like 4, RNA binding	3.8
	435854	AJ278120	Hs.4996	putative ankyrin-repeat containing prote	3.8
	459079	AI821122		gb:rs91g10.y5 NCI_CGAP_Fr3 Homo sapiens	3.8
55	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger)	3.8
	421977	W94197	Hs.110165	ribosomal protein L26 homolog	3.8
	437756	AA767537	Hs.197096	ESTs	3.8
	403696			C4001100:gi5852342 gb AA54015.1  (AF0	3.8
	453033	AA325869	Hs.31483	KIAA0281 gene product	3.8
60	441732	AW298818	Hs.127341	ESTs	3.8
	415884	H22966	Hs.13471	ESTs	3.8
	432646	AW753310		gb:RC3-CT0254-031099-012-c05 CT0254 Homo	3.8
	451059	AW297465	Hs.267150	KIAA1409 protein	3.8
	447057	AI423407	Hs.157697	ESTs	3.8
	418915	AI474778	Hs.118977	ESTs	3.8
65	441111	AI806867	Hs.126594	ESTs	3.8
	447818	W79940	Hs.21906	Homo sapiens clone 24670 mRNA sequence	3.8
	457183	H91882	Hs.118569	DNA-binding protein IDAX (inhibition of	3.8
	418358	L02840	Hs.84244	potassium voltage-gated channel, Shab-re	3.8
	410711	AB002316	Hs.65746	KIAA0318 protein	3.8
70	428878	AA436884	Hs.48926	ESTs	3.8
	438944	AA302517	Hs.92732	KIAA1444 protein	3.8
	420898	AB002379	Hs.100113	KIAA0381 protein	3.8
	418329	AW247430	Hs.84152	cystathionine-beta-synthase	3.8
	427209	H06509	Hs.92423	KIAA1566 protein	3.7
75	445319	AF052108	Hs.12513	Homo sapiens clone 23687 mRNA sequence	3.7
	428841	AI418430	Hs.104935	ESTs	3.7
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, ra	3.7
	443310	BE552018	Hs.133152	ESTs	3.7
	407728	AW071502	Hs.175931	ESTs	3.7
80	429643	AA455889	Hs.167729	FYVE-finger-containing Rab5 effector pro	3.7
	444127	N63620	Hs.13281	ESTs	3.7
	425652	AB021742	Hs.322431	neurogenic differentiation 2	3.7
	458072	AI890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fis, clone K	3.7

	459660	M79082		ESTs	3.7
	432188	AI362952	Hs.2928	solute carrier family 7 (cationic amino	3.7
	437627	AW469925	Hs.257837	ESTs	3.7
5	408508	AI806109	Hs.135736	KIAA1580 protein	3.7
	448999	AF179274	Hs.22791	transmembrane protein with EGF-like and	3.7
	410623	AW958932	Hs.293833	ESTs	3.7
	430744	AA485229	Hs.105649	ESTs	3.7
	454392	BE260893	Hs.236131	homeodomain-interacting protein kinase 2	3.7
10	453739	AL120266		ESTs	3.7
	407198	H91679		gb:rv04a07.s1 Soares fetal liver spleen	3.7
	405239	U89281		oxidative 3 alpha hydroxysteroid dehydro	3.7
	433615	AA732982	Hs.269607	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.7
	424800	AL035588	Hs.153203	MyoD family inhibitor	3.7
15	451027	AW519204	Hs.40808	ESTs	3.7
	415131	D61119		gb:HUM158C11B Clontech human fetal brain	3.7
	443454	AI057494	Hs.133421	ESTs	3.7
	423779	AW071837	Hs.57971	ESTs	3.7
	452092	BE245374	Hs.27842	hypothetical protein FLJ11210	3.7
20	435910	AI084152	Hs.21782	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.6
	447028	AI973128	Hs.167257	brain link protein-1	3.6
	452997	N64777	Hs.44656	ESTs	3.6
	408601	U47928	Hs.86122	protein A	3.6
	407332	AI801565	Hs.200113	Homo sapiens cDNA FLJ11379 fs, clone HE	3.6
25	455846	BE064420		gb:RC4-BT0311-241199-012-c08 BT0311 Homo	3.6
	433657	AI244368	Hs.8124	PH domain containing protein in retina 1	3.6
	421679	AI475110	Hs.203933	ESTs	3.6
	448985	AA324885	Hs.22777	carbonic anhydrase XI	3.6
	414709	AA704703	Hs.77031	Sp2 transcription factor	3.6
30	411775	H08342		gb:y187b09.r1 Soares infant brain 1NIB H	3.6
	439099	AB037800	Hs.6462	protein kinase C and casein kinase subst	3.6
	436315	BE390513	Hs.27935	hypothetical protein MGC4837	3.6
	423611	AB011163	Hs.129908	KIAA0591 protein	3.6
	453169	AB037815	Hs.32156	KIAA1394 protein	3.6
35	436954	AA740151	Hs.130425	ESTs	3.6
	439249	AF086060	Hs.170053	G-protein coupled receptor 88	3.6
	432058	AW665996	Hs.130729	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.6
	419390	AI701162	Hs.90207	hypothetical protein MGC11138	3.6
	428483	AI908539	Hs.184592	KIAA0344 gene product	3.6
40	409557	BE182896	Hs.211193	ESTs	3.6
	418049	AA211457	Hs.190488	Homo sapiens, Similar to nuclear localiz	3.6
	443774	AL117428	Hs.9740	DKFZP434A236 protein	3.6
	425331	AW962128		gb:EST374201 MAGE resequences, MAGG Homo	3.6
	445105	AF238869	Hs.263955	Homo sapiens clone GLSH-2 similar to gli	3.6
45	424051	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (f	3.6
	448420	AW015693	Hs.135614	ESTs	3.6
	428138	AA773842	Hs.293799	ESTs	3.6
	404185			Target Exon	3.6
	427517	AA644142	Hs.7107	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.6
50	443150	AI034467	Hs.34650	ESTs	3.6
	408065	AW954272		gb:EST366342 MAGE resequences, MAGC Homo	3.6
	435092	AL137310	Hs.4749	Homo sapiens mRNA; cDNA DKFZp761E13121 (	3.6
	418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	3.6
	433560	AI925195	Hs.130891	hypothetical protein MGC4400	3.6
55	432882	NM_013257	Hs.279696	serum/glucocorticoid regulated kinase-li	3.6
	412350	AI659306	Hs.73826	protein tyrosine phosphatase, non-recept	3.6
	439753	BE262233	Hs.7423	hypothetical protein from EUROIMAGE 2168	3.6
	451734	NM_006176	Hs.26944	neurogranin (protein kinase C substrate,	3.6
	437056	AI147061		gb:ok33a11.s1 Soares_NSF_F8_9W_OT_PA_P_S	3.6
60	438328	AI492261	Hs.32450	ESTs	3.6
	451489	NM_005503	Hs.26468	amyloid beta (A4) precursor protein-bind	3.6
	423641	AL137256	Hs.130489	ATPase, aminophospholipid transporter-II	3.6
	434784	AA649051	Hs.164007	ESTs	3.5
	441834	AL138034	Hs.7979	KIAA0735 gene product	3.5
	421183	AL135740	Hs.102447	TSC-22-like	3.5
65	452108	AW135982	Hs.203013	hypothetical protein FLJ12748	3.5
	425870	R13406	Hs.56782	ESTs	3.5
	425115	R44664	Hs.123956	ESTs	3.5
	444471	AB020684	Hs.11217	KIAA0877 protein	3.5
	419929	U90268	Hs.93810	cerebral cavernous malformations 1	3.5
70	407792	AI077715	Hs.39384	putative secreted ligand homologous to f	3.5
	422564	AI148006	Hs.222120	ESTs	3.5
	433323	AA805132	Hs.159142	ESTs	3.5
	435743	T66861	Hs.12962	ESTs	3.5
75	450297	AW901347	Hs.38592	hypothetical protein FLJ23342	3.5
	403341			Target Exon	3.5
	443761	AI525743	Hs.345187	ESTs	3.5
	458743	R53169	Hs.60712	KIAA0202 protein	3.5
	447925	AW292271	Hs.250718	ESTs	3.5
80	445424	AB028945	Hs.12698	cortactin SH3 domain-binding protein	3.5
	416874	H98752	Hs.42568	ESTs	3.5
	430456	AA314998	Hs.241503	hypothetical protein	3.5
	419647	AA348947	Hs.91816	hypothetical protein	3.5
	412707	AW205373	Hs.15443	Homo sapiens cDNA: FLJ21721 fs, clone C	3.5

	444458	BE041526	Hs.31746	hypothetical protein DKFZp547F072	3.5
	451066	AJ758660	Hs.206132	ESTs	3.5
	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypothes	3.5
5	420071	AB028985	Hs.94806	ATP-binding cassette, sub-family A (ABC1	3.5
	432625	AJ243556	Hs.94830	ESTs, Moderately similar to T03094 A-kin	3.5
	442118	AA976718	Hs.202242	ESTs	3.5
	421686	AB011156	Hs.106794	KIAA0584 protein	3.5
	428966	AF059214	Hs.194687	cholesterol 25-hydroxylase	3.5
10	444326	AI939357	Hs.270710	ESTs	3.5
	443361	AI792628	Hs.133273	ESTs	3.5
	427627	R87582	Hs.179915	guanine nucleotide binding protein (G pr	3.4
	434542	AA769310	Hs.61260	hypothetical protein FLJ13164	3.4
	419235	AW470411	Hs.288433	neurotrophin	3.4
15	440700	AW952281	Hs.296184	guanine nucleotide binding protein (G pr	3.4
	417084	H08370	Hs.33067	ESTs	3.4
	432925	AA878324		ESTs	3.4
	439920	H05430	Hs.288433	neurotrophin	3.4
	453710	AL119136	Hs.236131	homeodomain-interacting protein kinase 2	3.4
	412783	BE276738	Hs.74578	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	3.4
20	435977	AL138079	Hs.5012	brain-specific membrane-anchored protein	3.4
	431725	X65724	Hs.2839	Norrie disease (pseudoglioma)	3.4
	449611	AI970394	Hs.197075	ESTs	3.4
	448543	AW897741	Hs.21380	Homo sapiens mRNA; cDNA DKFZp586P1124 (I	3.4
25	430968	AW972830		gb:EST384925 MAGE resequences, MAGL Homo	3.4
	413530	AA130158	Hs.19977	ESTs, Moderately similar to ALU8_HUMAN A	3.4
	412043	BE156622	Hs.333371	Homo sapiens clone TA40 untranslated mRNA	3.4
	445666	R59960	Hs.282386	ESTs	3.4
	412820	BE001238		gb:CM3-BN0075-240200-101-d11 BN0075 Homo	3.4
30	458912	AI911066		ESTs	3.4
	452449	AW068658	Hs.20943	ESTs	3.4
	437085	AA743935	Hs.202329	ESTs	3.4
	419852	AW503756	Hs.286184	hypothetical protein dJ551D2.5	3.4
	448750	U95020	Hs.21903	calcium channel, voltage-dependent, beta	3.4
35	435741	AI240668	Hs.113099	ESTs	3.4
	445828	F05802	Hs.81907	ESTs	3.4
	419347	C15944	Hs.90005	superiorcervical ganglia, neural specifi	3.4
	431733	AW298410	Hs.21475	ESTs	3.4
	415949	H10562	Hs.21691	ESTs	3.4
40	400205			NM_006265: Homo sapiens RAD21 (S. pombe)	3.4
	437528	N59646	Hs.169745	crumbs (Drosophila) homolog 1	3.4
	442593	R39804	Hs.31961	ESTs	3.4
	442927	AI024347	Hs.131519	ESTs	3.4
	429528	AI985303	Hs.99361	ESTs	3.4
45	450756	AI733488	Hs.144052	ESTs	3.4
	437387	AI198874	Hs.28847	AD026 protein	3.4
	430347	NM_002039	Hs.239706	GRB2-associated binding protein 1	3.4
	404283			ENSP00000244751: Copine-like protein KIA	3.4
	433229	AB040925	Hs.91625	KIAA1492 protein	3.4
50	440274	R24595	Hs.7122	scrapie responsive protein 1	3.4
	436114	AA778232	Hs.19515	ESTs, Highly similar to NRG3_HUMAN PRO-N	3.4
	439690	AA843858	Hs.190567	ESTs	3.4
	450784	AW246803	Hs.47289	ESTs	3.3
	417868	AI078534	Hs.122592	ESTs	3.3
55	439793	AA018825	Hs.7934	Knuppel-like factor 4 (gut)	3.3
	456209	W50633	Hs.297792	ESTs	3.3
	421458	NM_003654	Hs.104578	carbohydrate (keratan sulfate Gal-6) sul	3.3
	438201	AA780243	Hs.54647	ESTs	3.3
	400302	N48058	Hs.1915	folate hydrolase (prostate-specific memb	3.3
60	425897	AA935315	Hs.48965	Homo sapiens cDNA: FLJ21693 fs, clone C	3.3
	423169	BE047009	Hs.21837	ESTs, Weakly similar to KIAA0927 protein	3.3
	415539	AI733881	Hs.72472	BMP-R1B	3.3
	450337	AI693256	Hs.202427	ESTs	3.3
	408447	AK002089	Hs.45080	Homo sapiens cDNA FLJ11227 fs, clone PL	3.3
65	423420	AI571364	Hs.128382	Homo sapiens mRNA; cDNA DKFZp7611224 (I	3.3
	429084	AJ001443	Hs.195614	splicing factor 3b, subunit 3, 130kD	3.3
	440435	AL042201	Hs.21273	transcription factor NYD-sp10	3.3
	453785	AI368236	Hs.283732	ESTs, Moderately similar to ALU1_HUMAN A	3.3
	448048	BE281291	Hs.170408	ESTs, Moderately similar to A47582 B-cal	3.3
70	436207	AA334774	Hs.12845	hypothetical protein MGC13159	3.3
	404632			NM_022490: Homo sapiens hypothetical prot	3.3
	411565	AW851728		gb:MR2-CT0222-011199-007-d06 CT0222 Homo	3.3
	416845	H95279	Hs.293788	gb:yu20h02a1 Soares fetal liver spleen	3.3
	436267	AW450938	Hs.180115	ESTs	3.3
75	426625	T78300	Hs.300642	serologically defined colon cancer antig	3.3
	401272			C9000559: gij2314195(embjCAB99338.1)(A	3.3
	435071	D60683	Hs.35495	ESTs	3.3
	433128	AB021923	Hs.23367	EST-YD1 protein	3.3
	426920	AA393351	Hs.132121	ESTs	3.3
80	423668	Y10148	Hs.131138	neurotensin receptor 2	3.3
	435056	AW023337	Hs.5422	glycoprotein M6B	3.3
	445534	AL038823	Hs.12840	Homo sapiens germfina mRNA sequence	3.3
	425010	T16837	Hs.4241	ESTs	3.3
	445260	AI218133	Hs.147617	ESTs	3.3



5	421094	AW978202	Hs.289064	hypothetical protein FLJ22251	3.3
	450358	AB010098	Hs.24907	coronin, actin-binding protein, 2B	3.3
	411048	AK001742	Hs.67991	hypothetical protein DKFZp434G0522	3.3
	432488	AA551010	Hs.216640	ESTs	3.3
	443672	AA323362	Hs.9667	butyrobetaine (gamma), 2-oxoglutarate di	3.3
	412719	AW016610	Hs.816	ESTs	3.3
	420050	AL118815	Hs.94653	neurochondrin	3.3
	410082	AA081594	Hs.158311	Musashi (Drosophila) homolog 1	3.3
10	408554	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	3.3
	431462	AW583672	Hs.256311	granin-like neuroendocrine peptide precu	3.2
	434574	AI424458	Hs.33470	ESTs	3.2
	437715	AA247152	Hs.200483	ESTs, Weakly similar to KIAA1074 protein	3.2
	426757	AW205640	Hs.158206	ESTs	3.2
	428187	AA770021	Hs.16332	ESTs	3.2
15	451597	AW295250	Hs.207536	ESTs	3.2
	400362	AF068294	Hs.272414	Homo sapiens HDCMB45P mRNA, partial cds	3.2
	417675	AI808607	Hs.3781	similar to murine leucine-rich repeat pr	3.2
	429550	AW293055	Hs.119357	ESTs	3.2
	404120			CS000537:glj3298595jgb AAC41376.1  (AF0	3.2
20	417123	BE326521	Hs.159450	ESTs	3.2
	450313	AI038989	Hs.332633	Bardet-Biedl syndrome 2	3.2
	425999	AW513051	Hs.332981	ESTs, Weakly similar to I38022 hypothei	3.2
	430526	AF181862	Hs.242407	G protein-coupled receptor, family C, gr	3.2
	452619	AW298597	Hs.61884	Homo sapiens, clone IMAGE:4298026, mRNA,	3.2
25	415558	AA885143	Hs.125719	ESTs	3.2
	451996	AW514021	Hs.245510	ESTs	3.2
	420560	AW207748	Hs.69116	ESTs	3.2
	432328	AI572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	3.2
30	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	3.2
	414300	AI304870	Hs.188680	ESTs	3.2
	437834	AA769294	Hs.283854	gbnz36g03.s1 NCJ_CGAP_GC81 Homo sapiens	3.2
	430694	AA810624	Hs.30936	ESTs, Weakly similar to H2BH_HUMAN HISTO	3.2
	447714	AW296313	Hs.255537	ESTs	3.2
35	412021	AW885592		gb:RC4-OT0071-090300-011-g11 OT0071 Homo	3.2
	443431	AI056847	Hs.20654	ESTs	3.2
	445774	AI254165	Hs.339968	ESTs	3.2
	431327	AW972220	Hs.105426	ESTs	3.2
	413335	AI613318	Hs.48442	ESTs	3.2
40	430809	AI791150	Hs.262009	ESTs, Moderately similar to I38022 hypot	3.2
	445858	AL133811		solute carrier family 1 (glial high affi	3.2
	450682	H50603	Hs.94037	hypothetical protein FLJ23053	3.2
	439039	AI656707	Hs.48713	ESTs	3.2
	401720			NM_014587:Homo sapiens SRY (sex determi	3.2
45	453740	AL120295	Hs.311809	ESTs, Moderately similar to PC4259 femi	3.2
	451032	W03692	Hs.323079	Homo sapiens mRNA: cDNA DKFZp564P116 (h	3.2
	413834	BE296896	Hs.224179	ESTs, Weakly similar to I38022 hypothei	3.2
	438138	R98299	Hs.177502	ESTs	3.2
	436338	W92147	Hs.118394	ESTs	3.2
50	417169	R13550	Hs.246773	ESTs	3.2
	424066	Z99348	Hs.112481	ESTs, Weakly similar to I38022 hypothei	3.2
	435767	H73505	Hs.117874	ESTs	3.2
	415314	N88802	Hs.5422	glycoprotein M5B	3.2
	448475	BE613134	Hs.247474	hypothetical protein FLJ21032	3.2
55	414699	AI815523	Hs.76930	synuclein, alpha (non A4 component of am	3.2
	438549	BE368801	Hs.21858	trinucleotide repeat containing 3	3.2
	453896	AW293483	Hs.255205	KIAA1853 protein	3.2
	419539	AF070590	Hs.90869	Homo sapiens clones 24522 and 24623 mRNA	3.1
	428832	AA578229	Hs.324239	ESTs, Moderately similar to ZN81_HUMAN Z	3.1
60	446636	AC002563	Hs.15767	clonin (rho-interacting, serine/threonin	3.1
	429046	X57436	Hs.194772	oligodendrocyte myelin glycoprotein	3.1
	421896	N52293	Hs.45107	ESTs	3.1
	413995	BE048148	Hs.75671	synaptin 1A (brain)	3.1
	414734	AA151712	Hs.82572	ESTs	3.1
	446147	AL133064	Hs.14051	Homo sapiens mRNA: cDNA DKFZp434A2417 (I	3.1
65	427712	AI368024	Hs.283696	ESTs	3.1
	406481			Target Exon	3.1
	453204	R10799	Hs.191990	ESTs	3.1
	422890	Z43784		ankyrin 3, node of Ranvier (ankyrin G)	3.1
70	422991	H10940	Hs.48965	Homo sapiens cDNA: FLJ21693 fs, clone C	3.1
	421030	AW161357		microtubule-associated protein tau	3.1
	423603	AB007880	Hs.129883	Homo sapiens KIAA0420 mRNA, complete cds	3.1
	413985	AI018666	Hs.75667	synaptophysin	3.1
	431721	AB032996	Hs.268044	KIAA1170 protein	3.1
75	434164	AW207019	Hs.148135	serine/threonine kinase 33	3.1
	429876	AB028977	Hs.225974	KIAA1054 protein	3.1
	423175	W27595	Hs.347310	hypothetical protein FLJ14627	3.1
	412799	AI267606		gb:aq91h03.x1 Stanley Frontal SB pool 1	3.1
	459318	NM_000038		gb:Homo sapiens adenomatosis polyposi c	3.1
80	453324	W26592	Hs.232089	ESTs	3.1
	424009	F11690		gb:HSC300041 normalized infant brain cDN	3.1
	436222	AI208737	Hs.122810	Homo sapiens cDNA FLJ11489 fs, clone HE	3.1
	414884	R54418	Hs.183745	hypothetical protein FLJ13456	3.1
	446882	AV660697	Hs.282700	ESTs	3.1

5	427241	AA399988	Hs.112087	Human DNA sequence from clone RP11-530N1	3.1
	455388	AW936234		gb:OVO-DT0020-090200-106-g05 DT0020 Homo	3.1
	415838	R44336	Hs.7093	ESTs	3.1
	451692	AL137422	Hs.26849	Homo sapiens mRNA; cDNA DKFZp761A1623 (f	3.1
	445294	Z45978		Human clone Z3826 mRNA sequence	3.1
	434460	AA478486	Hs.3852	KIAA0368 protein	3.1
	449919	A1674685	Hs.200141	ESTs	3.1
	440688	AW404591	Hs.147440	ESTs, Weakly similar to Z192_HUMAN ZINC	3.1
10	416801	X38834	Hs.79971	sal (Drosophila)-like 2	3.1
	428060	AA420616	Hs.249483	ESTs	3.1
	423597	AL043117	Hs.129872	sperm associated antigen 9	3.1
	452454	AW820480		gb:OV2-ST0298-140200-042410 ST0298 Homo	3.1
	445337	NM_013280	Hs.12523	fibronectin leucine rich transmembrane p	3.1
15	413974	BE208636	Hs.27788	ESTs	3.1
	422772	AL119565	Hs.120228	KIAA0749 protein	3.1
	423872	AB020316	Hs.134015	uronyl 2-sulfotransferase	3.1
	435375	AJ733610	Hs.187832	ESTs	3.1
	450661	AW952160	Hs.83849	ESTs	3.1
20	428647	AA830050	Hs.124344	ESTs	3.1
	400658			ENSP00000237081:KIAA1217 PROTEIN (FRAGM	3.0
	443845	AI590084	Hs.148485	ESTs, Weakly similar to A47161 Mac-2-bin	3.0
	446619	AL076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	3.0
	433980	AA137152	Hs.286049	phosphoserine aminotransferase	3.0
25	437738	AA766814	Hs.203475	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.0
	444772	AW450800	Hs.176859	ESTs	3.0
	453825	AL157475	Hs.35453	Homo sapiens mRNA; cDNA DKFZp761G151 (fr	3.0
	439971	W32474	Hs.301746	RAP2A, member of RAS oncogene family	3.0
	408449	NM_004408	Hs.166161	dynamitin 1	3.0
30	432821	BE170702	Hs.279005	solute carrier family 21 (organic anion	3.0
	453657	W23237	Hs.296162	AD037 protein	3.0
	407235	D20569	Hs.169407	SAC2 (suppressor of actin mutations 2, y	3.0
	428862	NM_000348	Hs.2316	SRY (sex determining region Y)-box 9 (ca	3.0
	424726	AK001007	Hs.138760	Homo sapiens cDNA FLJ10145 fs, clone HE	3.0
35	454253	AV660717	Hs.47144	DKFZP586N0819 protein	3.0
	450650	T65617	Hs.101257	hypothetical protein MGC3295	3.0
	418211	BE244746	Hs.247474	hypothetical protein FLJ21032	3.0
	440461	R57728	Hs.7193	KIAA1183 protein	3.0
	452850	H23230	Hs.22481	ESTs, Moderately similar to A46010 X-fin	3.0
40	431431	AL096711	Hs.252953	Human DNA sequence from clone RP3-403A15	3.0
	447881	BE620886	Hs.75354	GCN1 (general control of amino-acid synt	3.0
	454042	H22570		hypothetical protein FLJ20093	3.0
	429168	AA984682	Hs.146589	ESTs, Weakly similar to JC5238 galactosyl	3.0
	451391	AA017410	Hs.40568	ESTs	3.0
45	446377	AW014022	Hs.170953	ESTs	3.0
	430251	AA609246	Hs.181451	ESTs	3.0
	420658	AW985215	Hs.130707	ESTs	3.0
	454119	BE548773	Hs.40510	uncoupling protein 4	3.0
	451018	AW965599	Hs.247324	mitochondrial ribosomal protein S14	3.0
50	435321	R16814	Hs.112062	ESTs	3.0
	412494	AL133900	Hs.792	ADP-ribosylation factor domain protein 1	3.0
	423858	AL137326	Hs.133483	Homo sapiens mRNA; cDNA DKFZp434B0650 (f	3.0
	431242	AA987742	Hs.347534	KIAA1201 protein	3.0
	403022			C21000178:gij7341207:gb:AAAF61215.1:AF22	3.0
55	445899	A1263736	Hs.145626	ESTs	3.0
	440261	M81888	Hs.7117	glutamate receptor, ionotropic, AMPA 1	3.0
	446809	AW590171	Hs.101413	ESTs	3.0
	434269	AK001991	Hs.3781	similar to murine leucine-rich repeat pr	3.0
	418951	F07809	Hs.89506	paired box gene 6 (aniridia, keratitis)	3.0
60	448499	BE613280	Hs.77550	hypothetical protein MGC1780	3.0
	432229	AW290976	Hs.143587	ESTs	3.0
	443726	AI083825	Hs.148382	ESTs	3.0

TABLE 138:

65	Pkey:	Unique Eos probeset identifier number	
	CAT number:	Gene cluster number	
	Accession:	Genbank accession numbers	
70	Pkey	CAT Number	Accession
	408065	103646_1	AW954272 AI003154 AA059300 AA046911
	410099	117647_1	AA081630 T08671 AI174254 D83874 AW959843 AA364503 AA693467 AW993370 BE327037 AA167714 N79906 AW901977 AW901980 W52882 T07735 AA484549 W60090 D52685 T23811 BE327043 AW901768 BE551237 AA917004 AA716027 AJ439658 AA283724 AJ805992 AJ457096 AA084618 BE467738 AI092635 AI987863 AI697593 AA436618 AI167419 AJ418634 T31586 AA436630 AA706191 AJ041169 AJ422304 T03534 AA211402 AI204899 AJ366472 AW827081 AA788593 T32736 AJ767935 AA167791 AA747914 AA653870 AJ865504 BE169274 AW893230 AA210998 H24222 AA081774 BE000934 BE000834 AA334880
75	410126	117761_1	AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628
	411585	1249756_1	H08342 R52430 Z42067 AA095285
	411775	125757_1	AW885592 AW885594 AW885579 AW885651
80	412021	1272156_1	AJ267606 AA121045 AA126521
	412799	132817_1	H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z41952 AJ424991 AJ693507 AJ863108 AA599060 AJ091148 AA598889
	412811	132943_1	R39887 AA813482 AW016452 H06383 R41807 AJ364268 AA520528 AJ241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734 BE001236 BE001177 BE001180 BE001234
	412820	1330039_1	D61119 D81508 D81734
	415131	1523680_1	

418512	176394_1	AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074
420111	190755_1	AW890649
420352	192979_1	AA255652 AA280911 AW987920 AA262684
421030	19864_1	BE258835 AW966316 AA258918 AW843305 R14744 A1580388 BE071923 R36280
5		AW161357 A1879062 A1928938 AW161097 AW161167 BE314465 AA351715 F07096 AA179034 F08510 F00653 A1936671 AA476718 AW772454
10		A1807703 R44253 AA976667 A1985186 A1650254 H38942 R84829 AA018724 AA001000 H85934 AA019126 H85609 AA017000 AA339355 AW950556
15		D51397 AA213981 BE548002 A1056359 AA001560 AW952113 AA317769 A1857477 A1857475 AW249771 AW162661 H38943 AA018628 R85885
20		A1984613 A1934765 A1796172 AW157488 A1929191 R85523 D51221 D53851 H85610 A1749674 F21582 AA323145 AA019127 AA687444 T06745
25		A1599293 H29532 AA214029 AA223656 NM_016834 X14474 R19697 H09695 R17455 R13812 R19056 A1681231 A1590200 R37671 AA861828
30		A1990023 A1935669 AW005821 AA324581 H17335 R37659 RA2802 R46242 R50936 R59731 H28993 AA479907 RA4570 A1890696 AA308884
35		AA507078 R41274 A1365507 T16348 A1560453 F03259 F04722 T16312 AA016081 AW073061 BE314824 W28930 R44098 R51045
40		Z43784 R13382 AW572911 AA49369 H10737 R19503 A1632565 AW004030 BE502530 Z25032 AA805324 AA449241 A1651825 A1264863 AW196918
45		AA948267 A1953735 A1263703 AA319159 AW964436 A1903440 AW594171 A1857447 AW204071 AW956110 C15616 D81142 H17038 AW162343
50		T87230 A1366013 H10064 A1190479 A1093318 A1867923 BE219303 BE048820 A1198397 AA654667 Z39851 F02655 Z28734 F04161 T16575 F10145
55		AA318815 R40898
60		AL035633 F11794 F11783 H18042 T66089 H29379 R19493 AW134660 A1299437 AL133995 AA057405 N78357 AA917450 A1002692 T09262 T65008
65		H29290 A1200874 AA894415 A1732887 A1791768 A1733447 AA988785 N62128 T09261 AW956936
70		F11690 AW965370 AA333586 D30830
75		M19650 R18810 R18721 AW896146 AW889520 AA192362 AA176814 F12085 BE255264 BE251393 T65248 AA380585 AA380465 BE408684
80		AA459037 AW498869 AA776107 BE274289 D45269 M61958 AA378818 AW663180 AW672958 H08611 M78164 BE393721 AA348660 R36303
		AA498662 AA019090 AA001087 AA054302 AA019775 AA018808 AA019132 A1858240 R73218 H30477 H17776 AA659570 BE276750 AL118657
		AA375861 AA352427 AW581695 A1141188 N63474 AA654162 H17659 AL120696 T28967 AW498868 A1355918 AA902349 AA669098 A1088231
		A042604 AA555133 A183611 A1608822 A1275941 AW316805 AA349486 A1355233 R85117 AW613626 R49234 AA458846 N20669 H18693 AA977567
		T15423 AW002084 A1824721 N36242 AA17281 A1018212 AA912337 F09722 AA749449 AW879172 AA885427 AA916639 A1872560 F00482 H45184
		A1217251 AA775807 BE390071 AA303517 AA001050 BE515169 N44066 AL133684 A1807085 AA808009 AA915914 F00007 AA019749 AL121560
		AW675544 AW090233 AW072071 A1810932 A1089733 AW026222 AA770155 A1089647 A1085733 AW516061 AL037838 AL037835 A1863947 H50420
		R11203 AA019133 N94772 N71842 N29047 AA778138 AA554338 AA179865 N59453 T65212 AA054270 AW806630 AA533375 D13146 AA349487
		A1077160 BE255671 BE276795 BE250823 AL120301 BE311390 BE252483
		A1221919 Z19867 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 A1341345 AW288800 AA724951 AA931158 A1741227
		A1806660 A1982628 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 A1492961 A1361526 F04002 AA452141 Z35511 A1472655
		A1193667 A1341984 N92658 T32870 R52664 N50428 AW089291 A1934175 A1423737 D60665
		AW962128 AA355353 AA427363
		AA377823 AW954494 A022688
		AA380153 AA380233 AW963529
		AL041228 D82004 D61361 A1203314 A1990307 AW900295 A1018308 AW087473 AW183530 AA393346 H50055 AA935601
		A1739168 AA426249 A1199636 AW505198 AW977291 AA824583 AA883419 AA724079 A1015524 A1377728 AW293682 A1928140 AA731438 A1092404
		A1085630 AA731340
		D80842 AA443145 AL119015 AW904500
		AL031658 A1693758 AL040619 AW977914 AA811957 A1352198 AW104364 AA648367 AA897604 AW341668 A1201382 AL040620
		BE010038 AA676833 A1311783 T86895 W68032 BE064393 BE064394 BE157228 BE183282 A1936370 AA552514 T67280 AA039909
		AF084866 AF084870 AF084864 AF084867 AF084869 AF084865 AF084868 AW818206 AW812038 BE144813 BE144812 AW812041 AW812040
		AW812067 BE061583 BE061604 T05808 A1352469 AA580921 BE141782 BE061601 AW814393 AW885029
		AW972830 AA527647 AA489820 AA570362
		AW753310 AW974000 AA557840 AA558570 AW751539
		AA878324 A1863159 A1819686 AA570406 A1014377
		AA761668 AA573621 R92814 R09670
		H29682 AW665533 AW149901 A1572917 AA598500 A1686466 A1336390 AW864390 AW864320
		AA742643 AA808575 AW976668
		A1147061 AA743380 AA765223 AW976398 A1803927
		AW975186 AA807807 D29548
		AL133916 N79113 AF086101 N76721 AW950828 AA364013 AW955684 A1346341 A1867454 N54784 A1655270 A1421279 AW014882 AA775552
		N62351 N59253 AA626243 A1341407 BE175639 AA456968 A1358918 AA457077
		AA973905 A1299888 AA917019 H63235 T90711
		Z45978 U79248 T77277 R24952 AA361008 AW953678 T10376 AW860579 AW860657 AW364889 AW860635 AW860658 AW905164 W21226
		AA448954 W69484 AA993098 AA287413 AA449682 A1961815 W57612 AW271363 R45215 AW136256 A1865103 W69577 A1961825 AA747542
		AA173748 A1961816 F07708 R39461 F04829 F05938 AA172385
		AL133811 M78538 T07792 AW895859 AW895589 A119422 T79876 R19494 AF131756 H18570 T08285 F11532 Z42038 AW961984 AA683391
		M62092 AL119616 Z21141 AA663820 Z19748 H18462 AL120152 R43841 R37594 AA775980 F09194 A1207884 Z38142 F01555 AA020737 AL120362
		AW952737 T04912
		Z44514 A1352097 A1803984 AW235923 AW196558 A1954637 A1336983
		R36075 A1366546 R38167
		A1458682 H24240 R14537 R18426 AW867082
		A1339732 AA010300 AW515041 AA768334 N29860 AA425874 AA425118 AA865829 AW936878
		AW118072 A1631982 T15734 AA224195 A1701458 W20198 F26326 AA890570 N90552 AW071907 A1671352 A1375892 T03517 R88265 A1124088
		AA224388 A1084316 A1354686 T33652 A1140719 A1720211 T03490 A1372637 T15415 AW205836 AA630384 T03515 T33230 AA011731 AA4443303
		T33623 A1222556 T33511 T33785 A1419606 D55612
		AW820480 AW820288 A1902522
		AL120266 AW269469 AW890114
		H22570 AW292267 AW137298 AW874199 A1206120 H45263 AA788851 R49056 AW241428 A1921013 A1729293 A1684910 BE466753 AA340613
		AW025969 A1202561 A1243913 AW771106 F04969 A1654847 A194436 AW771447 AW103715 N64350 AA347011 A1431587 AA779107 AA041195
		A1358894 A1421678 A1018523 AA707199 AA110309 A1366468 AW020049 A1880103 AL119553 R42410 R55722 T66767 R43035 H17396 H45331
		F01659 Z38381 AA708686 A1081305 R53955 AA041432 W27787
		AW854832 AW854798 AW854857 AW854816 AW854834 AW854817
		AW936234 AW936074 AW936181 AW936179 AW936217 AW936077 AW936227 AW936191
		BE064420 BE064435 BE064429 BE064414 BE064400 BE064517
		A1911066 A1933734 A1680888 A1003599
		A1821122 A1821856

TABLE 13C:

Pkcy:

Ref:

Strand:

Unique number corresponding to an Eos probe set

Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

Indicates DNA strand from which exons were predicted.

NL\_position: Indicates nucleotide positions of predicted exons.

	Pkey	Ref	Strand	NL_position
5	400533	6981826	Minus	277132-277595
	400658	8118459	Minus	73525-73644
	400777	8131663	Plus	70745-71121
	401272	9797373	Minus	98374-98509
10	401720	6468551	Plus	7783-8468
	402145	8018280	Plus	113086-114800
	402604	9909420	Plus	20393-20767
	402605	9909420	Minus	47680-47973
	402855	9662953	Minus	59763-59909
15	403022	3132351	Plus	92097-92864
	403142	9444521	Plus	89286-90131
	403341	8569175	Plus	30699-30910
	403696	3135242	Minus	143467-143634
	404120	7342152	Plus	135775-136000
20	404185	4572584	Minus	129171-129327
	404283	2276311	Minus	99460-99564
	404541	8318559	Plus	103456-103664
	404584	9857511	Plus	138651-139153
25	404632	9796668	Plus	45098-45229
	404819	4678240	Plus	16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578
	405238	7249119	Minus	51728-51838
	405239	7249119	Plus	144345-144464,144690-144838,151750-151883,152407-152484
	405348	2914717	Minus	43310-43482
	405819	4007557	Plus	2830-2967
	406481	9864741	Minus	91439-91579

30  
35  
TABLE 14A: ABOUT 1111 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL CENTRAL NERVOUS SYSTEM  
Table 14A lists about 1111 genes up-regulated in glioblastoma compared to normal central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" CNS tissues was greater than or equal to 2.5. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various brain tumors. The "average" normal CNS tissue level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

40  
Pkey: Unique Eos probeset identifier number  
ExAccn: Exon Accession number, Genbank accession number  
UnigeneID: Unigene number  
Unigene Title: Unigene gene title  
R1: Ratio of GLIOBLASTOMA to CNS

Pkey	ExAccn	UnigeneID	Unigene Title	R1
45	422737	M26939	Hs.119571 collagen, type III, alpha 1 (Ehlers-Danl	32.8
423961	D13666	Hs.138348	periostin (OSF-2cs)	28.0
433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	25.3
414555	N98569	Hs.76422	phospholipase A2, group IIA (platelets,	24.3
424800	AL035588	Hs.153203	MyoD family inhibitor	22.6
417308	H60720	Hs.81892	KIAA0101 gene product	22.2
50	449539	W80363	ESTs	20.7
453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	18.7
414825	X06370	Hs.77432	epidermal growth factor receptor (avian	18.6
444190	AI878918	Hs.10526	cysteine and glycine-rich protein 2	17.2
412420	AL035668	Hs.73853	bone morphogenetic protein 2	16.7
55	417130	AW276858	S100 calcium-binding protein A4 (calcium	16.7
414217	AI309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	14.3
431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fs, clone CO	14.3
425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kd)	14.1
446584	U53445	Hs.15432	downregulated in ovarian cancer 1	13.9
60	422672	X12784	Hs.119129 collagen, type IV, alpha 1	13.6
402604			Target Exon	13.6
424835	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fs, clone PL	13.0
428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	12.9
434078	AW880709	Hs.283683	chromosome 8 open reading frame 4	12.5
65	414761	AI077228	enhancer of zeste (Drosophila) homolog 2	12.4
442432	BE093589	Hs.38178	hypothetical protein FLJ23468	12.2
456759	BE259150	Hs.127792	delta (Drosophila)-like 3	12.1
409638	AW450420	Hs.21335	ESTs	11.5
70	441269	AW015206	ESTs	10.5
435020	AW505076	Hs.301855	DiGeorge syndrome critical region gene 8	10.5
422163	AF027208	Hs.112360	prominin (mouse)-like 1	10.1
444969	AI203334	Hs.160628	ESTs	10.1
430132	AA204686	Hs.234149	hypothetical protein FLJ20647	9.9
75	433437	U20536	Hs.3280 caspase 6, apoptosis-related cysteine pr	9.4
445101	T75202	Hs.12314	Homo sapiens mRNA: cDNA DKFZp586C1019 (f	9.2
413929	BE501689	Hs.75617	collagen, type IV, alpha 2	9.1
425187	AW014486	Hs.22509	ESTs	9.1
449722	BE280074	Hs.23960	cyclin B1	8.9
449611	AI970394	Hs.197075	ESTs	8.9
80	428242	Hs.2250	leukemia inhibitory factor (cholenergic	8.9
419239	AA468183	Hs.184598	Homo sapiens cDNA: FLJ23241 fs, clone C	8.9
443731	AI083928	Hs.145418	ESTs	8.8
402855			NM_001839:Homo sapiens catponin 3, acid	8.7

5	447342	AJ199268	Hs.18322	Homo sapiens, Similar to RIKEN cDNA 2010	8.6
	410102	AW248508	Hs.279727	ESTs; homologue of PEM-3 (Ciona savignyi	8.5
	420602	AF060877	Hs.99236	regulator of G-protein signalling 20	8.4
	417426	NM_002291	Hs.82124	tannin, beta 1	8.4
	433800	AJ034361	Hs.135150	lung type-I cell membrane-associated gly	8.3
	417061	AJ675944	Hs.188691	Homo sapiens cDNA FLJ12033 fs, clone HE	8.1
	409451	AA382169	Hs.54483	N-myc (and STAT) interactor	8.1
	414622	AJ752666	Hs.76669	nicotinamide N-methyltransferase	8.1
10	430691	C14187	Hs.103538	ESTs	8.0
	447726	AL137638	Hs.19368	matrin 2	8.0
	417043	NM_004369	Hs.80988	collagen, type VI, alpha 3	7.9
	447004	AW296968	Hs.157539	ESTs	7.9
	409799	D11928	Hs.76845	phosphoserine phosphatase-like	7.8
15	426075	AW513691	Hs.270149	ESTs, Weakly similar to Z109260A B cell	7.8
	419938	AU078772	Hs.1279	complement component 1, r subcomponent	7.7
	419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C (CFTR	7.7
	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	7.5
	436291	BE568452	Hs.344037	protein regulator of cytokinesis 1	7.5
20	422048	NM_012445	Hs.288126	spodin 2, extracellular matrix protein	7.5
	406972	M32053	Hs.8728	gb:Human H19 RNA gene, complete cds.	7.4
	442802	AL133035	Hs.179703	hypothetical protein DKFZp434G171	7.4
	427581	NM_014788	Hs.50758	KIAA0129 gene product	7.3
	409142	AL136877	Hs.156351	SMC4 (structural maintenance of chromoso	7.3
25	409902	AJ337658	Hs.83484	ESTs	7.3
	418113	AJ272141	Hs.133100	SRY (sex determining region Y)-box 4	7.2
	449961	AW265634	Hs.83758	ESTs	7.2
	418203	X54942	Hs.153479	CDC28 protein kinase 2	7.2
30	424840	D79987	Hs.191381	extra spindle poles, S. cerevisiae, homo	7.2
	428728	NM_016625	Hs.197955	hypothetical protein	7.1
	429183	AB014604	Hs.278554	KIAA0704 protein	7.1
	439451	AF086270	Hs.111732	heterochromatin-like protein 1	7.1
	422106	D84239	Hs.172928	Fc fragment of IgG binding protein	7.0
	406850	AJ624300	Hs.36820	collagen, type I, alpha 1	7.0
35	453941	U39817	Hs.185909	Bloom syndrome	6.9
	425234	AW152225	Hs.110165	ESTs, Weakly similar to I38022 hypotheti	6.9
	421977	W94197	Hs.182364	ribosomal protein L26 homolog	6.8
	411078	AJ222020	Hs.173233	CocooCrisp	6.7
	427019	AA001732	Hs.38173	hypothetical protein FLJ10970	6.7
40	448769	N66037	Hs.301989	ESTs	6.7
	418400	BE243026	Hs.300383	KIAA0246 protein	6.6
	408161	AW952912	Hs.125296	hypothetical protein MGC3032	6.6
	440210	AW674562	Hs.133022	ESTs	6.6
	437036	AJ571514	Hs.69280	ESTs	6.6
45	411968	AJ207410	Hs.79432	Homo sapiens, clone IMAGE:3636299, mRNA,	6.6
	416658	U03272	Hs.346514	fibrillin 2 (congenital contractural ara	6.6
	449300	AJ656959	Hs.195648	ESTs	6.5
	440052	AJ633744	Hs.73817	ESTs, Weakly similar to I38022 hypotheti	6.5
	412326	R07566	Hs.256150	small inducible cytokine A3 (homologous	6.5
50	434808	AF155108	Hs.108106	Homo sapiens, Similar to RIKEN cDNA 2810	6.5
	452461	N78223	Hs.624	transcription factor	6.5
	408243	Y00787	Hs.1848	interleukin 8	6.5
	424954	NM_000546		tumor protein p53 (Li-Fraumeni syndrome)	6.4
	450375	AA009647		a disintegrin and metalloproteinase doma	6.4
55	406478		Hs.179565	Target Exon	6.4
	427528	AU077143		minichromosome maintenance deficient (S,	6.4
	439710	AF086543		gb:Homo sapiens full length insert cDNA	6.4
	458814	AJ498957	Hs.170861	ESTs, Weakly similar to Z195_HUMAN ZINC	6.4
	410276	AJ554545	Hs.68301	angiotensin-2	6.4
60	425289	AW139342	Hs.155530	interferon, gamma-inducible protein 18	6.3
	427871	AW992405	Hs.59622	Homo sapiens, clone IMAGE:3507281, mRNA,	6.3
	436895	AF037335	Hs.5338	carbonic anhydrase XII	6.3
	447458	AJ741082	Hs.158961	ESTs	6.3
	447439	AA313565	Hs.145020	ESTs, Weakly similar to KIAA1205 protein	6.3
65	413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	6.3
	449969	AW295142	Hs.180187	Homo sapiens cDNA FLJ14337 fs, clone PL	6.2
	440704	M69241	Hs.162	Insulin-like growth factor binding prote	6.2
	400419	AF084545		Target	6.2
	412140	AA219691	Hs.73625	RAB8 interacting, kinesin-like (rabkines	6.2
70	409731	AA125985	Hs.56145	thymosin, beta, identified in neuroblast	6.2
	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	6.2
	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	6.1
	430630	AW269920	Hs.2621	cystatin A (statin A)	6.0
	410064	X53416	Hs.195464	filamin A, alpha (actin-binding protein-	6.0
75	432281	AK001239	Hs.274263	hypothetical protein FLJ10377	6.0
	413627	BE182082	Hs.246973	ESTs	6.0
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	5.9
	421899	AJ011895	Hs.109281	Nef-associated factor 1	5.9
	407182	AA312551	Hs.230157	ESTs	5.9
80	410286	AJ739159	Hs.61898	OKFZP586N2124 protein	5.9
	409829	M33552	Hs.56729	lymphocyte-specific protein 1	5.9
	446657	AJ335191	Hs.260702	ESTs, Weakly similar to Z109260A B cell	5.8
	418097	R45137	Hs.21868	ESTs	5.8
	428450	NM_014791	Hs.184339	KIAA0175 gene product	5.8

	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	5.7
	421988	AW450481	Hs.161333	ESTs	5.7
	422283	AW411307	Hs.114311	CDC45 (cell division cycle 45, S.cerevis	5.7
5	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	5.7
	434846	AW295389	Hs.119768	ESTs	5.7
	412567	AI750979	Hs.74034	Homo sapiens clone 24651 mRNA sequence	5.7
	452372	AI885742	Hs.228474	ESTs	5.6
	443247	BE614387	Hs.333893	c-Myc target JPO1	5.6
10	423198	MB1933	Hs.1634	cell division cycle 25A	5.6
	445873	AA250970	Hs.251946	poly(A)-binding protein, cytoplasmic 14	5.6
	437034	AA742643		gbny91c01.s1 NC1_CGAP_GCB1 Homo sapiens	5.6
	429447	AW812452	Hs.83286	ESTs, Weakly similar to S14747 sphingomy	5.6
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	5.6
15	437695	AA769202	Hs.192142	ESTs	5.6
	426935	NM_000088	Hs.172928	collagen, type I, alpha 1	5.6
	453361	AA035197	Hs.107375	ESTs	5.5
	418293	AI224483	Hs.16063	hypothetical protein FLJ21877	5.5
	405348			C7001664.gi112698061 dbj BAB21849.1  (AB	5.5
20	458079	AI796870	Hs.54277	DNA segment on chromosome X (unique) 992	5.4
	452799	AI948829	Hs.213786	ESTs	5.4
	448935	AL078596	Hs.22591	nuclear receptor subfamily 2, group E, m	5.4
	422809	AK001379	Hs.121028	hypothetical protein FLJ10549	5.4
	442547	AA306997	Hs.217484	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.4
25	424009	F11690		gb:HSC30D041 normalized infant brain cDN	5.4
	440332	AI218517	Hs.188051	ESTs	5.4
	422094	AF129535	Hs.272027	F-box only protein 5	5.4
	443884	N20617	Hs.194397	leptin receptor	5.4
	422493	AW474183	Hs.250173	hypothetical protein FLJ13158	5.4
30	432731	R31178	Hs.287820	fibronectin 1	5.4
	426108	AA622037	Hs.166468	programmed cell death 5	5.3
	407624	AW157431	Hs.248941	ESTs	5.3
	411048	AK001742	Hs.67991	hypothetical protein DKFZp434G0522	5.3
	412471	M63193	Hs.73946	endothelial cell growth factor 1 (platelet	5.3
35	414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	5.2
	414774	X02419	Hs.77274	plasminogen activator, urokinase	5.2
	413786	AW613780	Hs.13500	ESTs	5.2
	454860	AW635767		gb:QV4-LT0016-240200-110-b08 LT0016 Homo	5.2
	428037	N47474	Hs.89230	potassium intermediate/small conductance	5.2
40	420311	AW445044	Hs.38207	Human DNA sequence from clone RP4-530i15	5.1
	416737	AF154335	Hs.79691	UIM domain protein	5.1
	445837	AI261700	Hs.145544	ESTs	5.1
	425882	U83115	Hs.161002	absent in melanoma 1	5.1
45	415682	AI347128	Hs.191870	ESTs	5.1
	414053	BE391635	Hs.75725	transgelin 2	5.1
	453884	AA355925	Hs.36232	KIAA0186 gene product	5.1
	431512	BE270734	Hs.2795	lactate dehydrogenase A	5.1
	432593	AW301003	Hs.51483	ESTs, Weakly similar to hypothetical pro	5.0
	433323	AA805132	Hs.159142	ESTs	5.0
50	443744	AI084326	Hs.271548	ESTs, Weakly similar to I78885 serine/th	5.0
	410434	AF051152	Hs.63668	tol-like receptor 2	5.0
	420018	U56387	Hs.94376	proprotein convertase subtilisin/kexin 1	5.0
	419485	AA489023	Hs.95807	ESTs, Weakly similar to unnamed protein	4.9
	446131	NM_000929	Hs.290	phosphotriase A2, group V	4.9
55	412777	AI335773	Hs.270123	ESTs	4.9
	449246	AW411209	Hs.23363	hypothetical protein FLJ10983	4.9
	433244	AB040943	Hs.271285	KIAA1510 protein	4.9
	407235	D20569	Hs.169407	SAC2 (suppressor of actin mutations 2, y	4.9
	445118	AI208762	Hs.345572	ESTs	4.9
60	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	4.9
	420092	AA814043	Hs.88045	ESTs	4.9
	412811	H06382		ESTs	4.9
	436607	AW681783	Hs.211061	ESTs	4.9
	438456	AA913381	Hs.20594	ESTs	4.9
65	443883	AA114212	Hs.9930	serine (or cysteine) proteinase inhibitor	4.9
	431553	X78075	Hs.2799	cartilage linking protein 1	4.9
	439999	AA115811	Hs.6838	ras homolog gene family, member E	4.9
	411252	AB018549	Hs.69328	MD-2 protein	4.9
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypotheti	4.8
70	429433	AA452899	Hs.213586	ESTs, Weakly similar to KIAA1353 protein	4.8
	403349	NM_001406		ephrin-B3	4.8
	402274			C190004987.gi4567179 gb AA023607.1 AC00	4.8
	426044	AA502490	Hs.170290	ESTs	4.8
	423600	AI633559	Hs.310359	ESTs	4.8
75	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger	4.8
	431117	AF003522	Hs.250500	delta (Drosophila)-like 1	4.8
	418054	NM_002318	Hs.83354	lysyl oxidase-like 2	4.7
	441703	AW390054	Hs.192843	leucine zipper protein FKSG14	4.7
	439627	BE621702	Hs.25076	hypothetical protein FLJ21841	4.7
80	445900	AF070526	Hs.125036	Homo sapiens clone 24787 mRNA sequence	4.7
	435937	AA830893	Hs.119769	ESTs	4.7
	403961			Target Exon	4.7
	407862	BE548267	Hs.337986	Homo sapiens cDNA FLJ10934 fls, clone OV	4.6
	408523	AW833259	Hs.314287	ESTs	4.6

	403481		Target Exon	4.6
	423529	T87318	ESTs	4.6
	416847	L43821	enhancer of filamentation 1 (cas-like do	4.6
5	453362	H14988	ESTs	4.6
	407013	U35637	gb:Human nebulin mRNA, partial cds	4.6
	423757	AL049337	Homo sapiens mRNA; cDNA DKFZp564P016 (tr	4.6
	432363	AA534489	gb:nf76g11.s1 NCI_CGAP_Co3 Homo sapiens	4.6
	408380	AF123050	disubiquitin	4.6
10	429149	AW193360	ESTs, Weakly similar to I38022 hypotheti	4.6
	422170	A1791949	ant-Mullerian hormone	4.6
	405558		Target Exon	4.6
	410295	AA741357	Hs.5174 nidogen (enactin)	4.6
	450166	AA429504	ESTs	4.6
15	451418	BE387790	Hs.26369 hypothetical protein FLJ20287	4.5
	420075	AF142482	Hs.203846 TEA domain family member 3	4.5
	422158	L10343	Hs.112341 protease inhibitor 3, skin-derived (SKAL	4.5
	457465	AW301344	Hs.122908 DNA replication factor	4.5
	436827	H72187	Hs.5322 guanine nucleotide binding protein (G pr	4.5
20	452620	AA436504	Hs.119286 ESTs	4.5
	424381	AA285249	Hs.146329 protein kinase Chk2	4.5
	444656	A1277924	Hs.145199 ESTs	4.5
	450639	A1703186	Hs.277174 ESTs	4.5
	424247	X14008	Hs.234734 lysozyme (renal amyloidosis)	4.5
25	423178	A1033140	Hs.124983 Homo sapiens mRNA; cDNA DKFZp564C142 (tr	4.5
	447072	D61594	Hs.17279 tyrosylprotein sulfotransferase 1	4.5
	447444	AK000318	Hs.18616 hypothetical protein FLJ20311	4.4
	401454		NM_014226*Homo sapiens renal tumor anti	4.4
	420560	AW207748	Hs.59115 ESTs	4.4
30	409205	A1952884	Hs.14832 ESTs, Moderately similar to unnamed prot	4.4
	451129	BE072881	gb:RC2-BT0548-200300-012-e09 BT0548 Homo	4.4
	412530	AA766268	Hs.266273 hypothetical protein FLJ13346	4.4
	447752	M73700	Hs.105938 lactotransferrin	4.4
	429083	Y09397	Hs.227817 BCL2-related protein A1	4.4
35	418283	S79895	Hs.83942 cathepsin K (pseudosclerosis)	4.3
	424736	AF230877	Hs.152701 microtubule-interacting protein that ass	4.3
	416379	N38857	Hs.203933 ESTs	4.3
	452994	AW982597	Hs.31305 KIAA1547 protein	4.3
	437834	AA769294	gb:nz36g03.s1 NCI_CGAP_GCB1 Homo sapiens	4.3
40	441035	A1694309	Hs.126458 ESTs	4.3
	425292	NM_005824	Hs.155545 37 kDa leucine-rich repeat (LRR) protein	4.3
	418030	BE207573	Hs.83321 neuromedin B	4.3
	450811	A1739486	Hs.245497 ESTs	4.3
	438458	AW975186	gb:EST387294 MAGE resequencas, MAGN Homo	4.3
45	442201	AW516704	Hs.208726 ESTs	4.3
	429732	U20158	Hs.2488 lymphocyte cytosolic protein 2 (SH2 doma	4.3
	435677	AA694142	Hs.293726 ESTs, Weakly similar to TSGA RAT TESTIS	4.3
	442832	AW206560	Hs.253569 ESTs	4.3
	449318	AW236021	Hs.78531 Homo sapiens, Similar to RIKEN cDNA 5730	4.2
50	421027	AA761198	Hs.55254 ESTs	4.2
	414300	A1304870	Hs.188680 ESTs	4.2
	452874	AK001061	Hs.30925 hypothetical protein FLJ10199	4.2
	444181	N52543	Hs.142940 ESTs	4.2
	416908	AA333990	Hs.80424 coagulation factor XIII, A1 polypeptide	4.2
55	418483	W26076	Hs.221847 ESTs	4.2
	443318	A1051603	Hs.133141 ESTs	4.2
	415079	R43179	Hs.22895 hypothetical protein FLJ23548	4.2
	416871	H98716	gb:yx13d08.s1 Soares melanocyte 2NbHM Ho	4.2
	423678	AW963357	Hs.7847 ESTs	4.2
60	429643	AA455889	Hs.167279 FYVE-finger-containing Rab5 effector pro	4.2
	438875	AA827640	Hs.189059 ESTs	4.2
	428600	AW853261	Hs.242413 hypothetical protein DKFZp434K1421	4.2
	430968	AW972830	gb:EST384925 MAGE resequencas, MAGL Homo	4.2
	405872	A1760903	gb:wi09h08.x1 NCI_CGAP_CLL1 Homo sapiens	4.2
65	403790		NM_001334*Homo sapiens cathepsin O (CTS	4.1
	409112	BE243971	Hs.50649 quinone oxidoreductase homolog	4.1
	435703	AW830133	Hs.83313 GK003 protein	4.1
	432625	A1243596	Hs.94830 ESTs, Moderately similar to T03094 A-kin	4.1
	404407		Target Exon	4.1
70	412568	A1878826	Hs.74034 caveolin 1, caveolae protein, 22kD	4.1
	422087	X58968	Hs.111301 matrix metalloproteinase 2 (gelatinase A	4.1
	435143	R12375	Hs.194500 ESTs	4.1
	447497	AW167254	Hs.205722 ESTs	4.1
	456304	A1820973	gb:nc21c02.y5 NCI_CGAP_Py1 Homo sapiens	4.1
75	427676	AA394062	Hs.300772 tropomyosin 2 (beta)	4.1
	436608	AA628980	down syndrome critical region protein DS	4.1
	453331	A1240665	ESTs	4.0
	420004	AW975532	Hs.164039 ESTs, Moderately similar to I38022 hypot	4.0
	412125	Y17114	Hs.73393 eyes absent (Drosophila) homolog 4	4.0
80	426215	AW983419	Hs.155223 stanniocalcin 2	4.0
	407603	AW955705	Hs.62604 Homo sapiens, clone IMAGE:4299322, mRNA,	4.0
	450581	AF081513	Hs.25195 TGF-beta 4	4.0
	415323	BE269352	Hs.949 neutrophil cytosolic factor 2 (65kD, chr	4.0
	409893	AW247090	Hs.57101 minichromosome maintenance deficient (S.	4.0

	432058	AW665996	Hs.130729	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.0
	444609	AW571659	Hs.278081	ESTs	4.0
	445666	R59960	Hs.282386	ESTs	4.0
5	437814	AI088192	Hs.135474	ESTs, Weakly similar to DOX9_HUMAN ATP-D	4.0
	414948	C15240	Hs.182155	ESTs	4.0
	435542	AA687376		ESTs	4.0
	422564	AI148006	Hs.222120	ESTs	4.0
	449571	AW016812	Hs.200266	ESTs	4.0
10	433556	W56321	Hs.111460	calcium/calmodulin-dependent protein kin	4.0
	458946	AA009716	Hs.42311	ESTs	4.0
	449655	AI021987	Hs.59970	ESTs	4.0
	426649	AI914936	Hs.97152	ESTs	4.0
	457292	AI921270	Hs.281462	hypothetical protein FLJ14251	4.0
	440435	AL042201	Hs.21273	transcription factor NYD-sp10	4.0
15	456977	AK000252	Hs.169758	hypothetical protein FLJ20245	4.0
	420649	AI869964	Hs.124704	ESTs, Moderately similar to S65657 alpha	4.0
	416406	O86961	Hs.79299	lipoma HMGIC fusion partner-like 2	4.0
	446291	BE397753	Hs.14623	interferon, gamma-inducible protein 30	3.9
	449256	AA059050	Hs.59847	ESTs	3.9
20	421637	AF035290	Hs.106300	Homo sapiens clone 23556 mRNA sequence	3.9
	456306	AA225313	Hs.222886	ESTs, Weakly similar to TRHY_HUMAN TRICH	3.9
	438372	AI140189	Hs.123191	ESTs	3.9
	427375	AL035450	Hs.177536	metallocarboxypeptidase CPX-1	3.9
25	415131	D61119		gb:HUM158C118 Clontech human fetal brain	3.9
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	3.9
	424998	U58515	Hs.154138	chitinase 3-like 2	3.9
	433376	AI249361	Hs.74122	caspase 4, apoptosis-related cysteine pr	3.9
	455104	BE064863		gb:RC1-BT0313-110300-015-f06 BT0313 Homo	3.9
30	443426	AF098158	Hs.9329	chromosome 20 open reading frame 1	3.9
	419594	AA013051	Hs.91417	topoisomerase (DNA) II binding protein	3.9
	417576	AA339449	Hs.82285	phosphoribosylglycinamide formyltransfer	3.9
	416857	AA188775	Hs.292453	ESTs	3.9
	434784	AA649051	Hs.164007	ESTs	3.8
35	438898	AI819863	Hs.106243	ESTs	3.8
	408102	U46351	Hs.621	lectin, galactoside-binding, soluble, 3	3.8
	422081	AW136820	Hs.196011	ESTs	3.8
	411688	AW953440		gb:EST365510 MAGE resequences, MAGB Homo	3.8
	447343	AA256641	Hs.236894	ESTs, Highly similar to S02392 alpha-2-m	3.8
40	406395			Target Exon	3.8
	433675	AW977653	Hs.75319	ribonucleotide reductase M2 polypeptide	3.8
	403696			C4001100:gil5852342[gb]AA054015.1j (AF0	3.8
	443740	R56434	Hs.21062	ESTs	3.8
	413076	U10564	Hs.75188	wee1 (S. pombe) homolog	3.8
45	409189	AA125984		gb:zn27h06.r1 Stratagene neuroepithelium	3.8
	444326	AI939357	Hs.270710	ESTs	3.8
	436899	AA764852	Hs.291567	ESTs	3.8
	445075	AK651827	Hs.344767	ESTs	3.8
	416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	3.8
50	429163	AA884766		gb:am20a10.a1 Soares_NFL_T_GBC_S1 Homo s	3.8
	416114	AI695549	Hs.183868	glucuronidase, beta	3.8
	417018	M16038	Hs.80887	v-yes-1 Yamaguchi sarcoma viral related	3.8
	446839	BE091926	Hs.16244	mitotic spindle coiled-coil related prot	3.8
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	3.8
55	416664	H72780	Hs.20289	ESTs	3.8
	449444	AW818436	Hs.23590	solute carrier family 16 (monocarboxylic	3.8
	419735	AW750056	Hs.169577	Homo sapiens cDNA FLJ14743 fis, clone NT	3.8
	448275	BE514434	Hs.20830	kinesin-like 2	3.7
	405141	Y14443		zinc finger protein 200	3.7
60	411537	BE073250		gb:MR0-BT0551-060300-102-e05 BT0551 Homo	3.7
	422648	O86983	Hs.118893	Melanoma associated gene	3.7
	449145	AI832122	Hs.198408	ESTs	3.7
	428060	AA420616	Hs.249483	ESTs	3.7
	404584			Target Exon	3.7
65	418596	AW976721	Hs.293327	ESTs	3.7
	458072	AI890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fis, clone K	3.7
	445908	R13580	Hs.13436	Homo sapiens clone 24425 mRNA sequence	3.7
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	3.7
	431770	BE221880	Hs.268555	5'-3' exonuclease 2	3.7
70	427809	M26380	Hs.180878	lipoprotein lipase	3.7
	436674	AA725002	Hs.272018	low molecular mass ubiquinone-binding pr	3.7
	413450	Z99716	Hs.75372	N-acetylglucosaminidase, alpha-	3.7
	434467	BE552368	Hs.231853	Homo sapiens cDNA FLJ13445 fis, clone PL	3.7
	448048	BE281291	Hs.170408	ESTs, Moderately similar to A47582 B-cel	3.7
75	422798	R92347	Hs.34574	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.7
	402082			C18000743:gil5678363[ref]JNP_033416.1j	3.7
	448019	AW947164	Hs.195641	ESTs, Moderately similar to I380222 hypot	3.7
	428873	AI701609	Hs.98908	ESTs	3.7
	437323	AA371145	Hs.194397	leptin receptor	3.7
80	413095	AA494359	Hs.30715	potassium voltage-gated channel, Isk-rel	3.7
	425139	AW630488	Hs.25338	protease, serine, 23	3.7
	452279	AA286844	Hs.61260	hypothetical protein FLJ13164	3.7
	439574	AI469788	Hs.165190	ESTs	3.7
	408829	NM_006042	Hs.48384	heparan sulfate (glucosamine) 3-O-sulfot	3.7



5	407838	BE146411	Hs.40342	putative nuclear protein	3.7
	437748	AF234882	Hs.5814	suppression of tumorigenicity 7	3.6
	437470	AL390147	Hs.134742	hypothetical protein DKFZp547D065	3.6
	400288	X06256	Hs.149609	integrin, alpha 5 (fibronectin receptor,	3.6
	453438	AA69935	Hs.22792	ESTs	3.6
	415024	AI983981	Hs.189114	ESTs	3.6
	419713	AW968058	Hs.92381	nucleoside diphosphate linked moi	3.6
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALUF_HUMAN !!!!	3.6
10	416427	BE244050	Hs.78307	Rac/Cdc42 guanine exchange factor (GEF)	3.6
	448002	Y15227	Hs.20149	deleted in lymphocytic leukemia, 1	3.6
	441362	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E coli Re	3.6
	456534	X91195	Hs.100623	phospholipase C, beta 3, neighbor pseudo	3.6
	402239			Target Exon	3.6
15	450297	AW901347	Hs.38592	hypothetical protein FLJ23342	3.6
	443715	AI583187	Hs.9700	cyclin E1	3.6
	403011			ENSP00000215330: Probable serine/threonine	3.6
	428403	AI393048	Hs.326159	leucine rich repeat (in FLJ) interact	3.6
	425202	AW962782	Hs.152049	ESTs, Weakly similar to I38022 hypotheti	3.6
20	409557	BE182896	Hs.211193	ESTs	3.6
	453948	AI970797	Hs.64859	ESTs	3.6
	440225	BE295782	Hs.159	tumor necrosis factor receptor superfamily	3.6
	425331	AW962128		gb:EST374201 MAGE resequences, MAGG Homo	3.6
	442326	H92962	Hs.124813	hypothetical protein MGC14817	3.6
25	437640	AA764893	Hs.272155	ESTs, Weakly similar to I38022 hypotheti	3.6
	424051	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (I	3.6
	406481			Target Exon	3.6
	433835	AI806185		gb:wf26a10.x1 Soares_NFL_T_GBC_S1 Homo s	3.6
30	456052	BE311901	Hs.28935	gb:601142614F1 NIH_MGC_14 Homo sapiens c	3.6
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	3.5
	439726	AW449893	Hs.293707	ESTs, Weakly similar to I38598 zinc fing	3.5
	416913	AW934714		gb:RC1-DT0001-031299-011-a11 DT0001 Homo	3.5
	419402	Z68155	Hs.90291	laminin, beta 2 (laminin S)	3.5
	403108			ENSP00000241415: Hypothetical 67.7 kDa p	3.5
35	426509	M31166	Hs.2050	pentadactyl-related gene, rapidly induced b	3.5
	418883	BE387036	Hs.1211	acid phosphatase 5, tartrate resistant	3.5
	432188	AI362952	Hs.2928	solute carrier family 7 (cationic amino	3.5
	448789	BE539108	Hs.22051	hypothetical protein MGC15548	3.5
	427299	AA830210	Hs.214263	ESTs, Moderately similar to ALU1_HUMAN A	3.5
40	425212	AW962253	Hs.171618	ESTs	3.5
	422938	NM_001809	Hs.1594	centromere protein A (17kD)	3.5
	442264	AI278777	Hs.263455	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.5
	407253	AA411175	Hs.141939	ESTs, Moderately similar to S65657 alpha	3.5
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	3.5
45	452682	AA456193	Hs.9071	progesterone membrane binding protein	3.5
	421247	BE391727	Hs.102910	general transcription factor IIIH, polype	3.5
	418049	AA211467	Hs.190488	Homo sapiens, Similar to nuclear localiz	3.5
	453792	AL134539	Hs.254129	KJAA1678	3.5
	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fs, clone PL	3.5
50	412014	AI620650	Hs.43761	ESTs, Weakly similar to A45010 X-linked	3.5
	440370	AA884000	Hs.8173	hypothetical protein FLJ10803	3.5
	407729	T40707	Hs.270862	ESTs	3.5
	438527	AI969251	Hs.115325	RAB7, member RAS oncogene family-like 1	3.5
55	455646	BE084420		gb:RC4-BT0311-241199-012-c08 BT0311 Homo	3.5
	418630	AI351311	Hs.251946	poly(A)-binding protein, cytoplasmic 1-1	3.5
	432242	AW022715	Hs.162160	ESTs, Weakly similar to ALU4_HUMAN ALU S	3.5
	424503	NM_002205	Hs.149609	Integrin, alpha 5 (fibronectin receptor,	3.4
	449932	AI675444	Hs.263024	ESTs	3.4
	427700	AA262294	Hs.180383	dual specificity phosphatase 6	3.4
60	403849			Target Exon	3.4
	429747	M87507	Hs.2490	caspase 1, apoptosis-related cysteine pr	3.4
	451446	AI826288	Hs.171637	hypothetical protein MGC2628	3.4
	434589	AF147363		gb:Homo sapiens full length insert cDNA	3.4
	403361			NM_002210: Homo sapiens Integrin, alpha	3.4
65	420841	AI625251	Hs.94037	hypothetical protein FLJ23053	3.4
	438206	AA780385	Hs.187885	ESTs	3.4
	425295	AA431366	Hs.37251	ESTs	3.4
	411789	AF245505	Hs.72157	Adiccan	3.4
	440948	AW188311	Hs.128619	ESTs	3.4
70	439518	W76326		gb:zd60d04.r1 Soares_fetal_heart_NbHH19W	3.4
	418821	AA436002	Hs.183161	ESTs	3.4
	459660	M79082		ESTs	3.4
	404209			Target Exon	3.4
	443950	NM_001425	Hs.9999	epithelial membrane protein 3	3.4
75	430694	AA810624	Hs.30936	ESTs, Weakly similar to H2BH_HUMAN HISTO	3.4
	425300	AW601773	Hs.270259	ESTs	3.4
	420300	AA258245	Hs.127573	Homo sapiens FKSG41 (FKSG41) mRNA, compl	3.4
	458438	AI141520	Hs.151464	ESTs, Weakly similar to ALUC_HUMAN !!!!	3.4
	444911	U06117	Hs.250	xanthine dehydrogenase	3.4
80	421064	AI245432	Hs.101382	tumor necrosis factor, alpha-induced pro	3.4
	441287	AW293132	Hs.131373	ESTs	3.4
	446960	AW294936	Hs.156762	ESTs	3.4
	405605			C2001342.gj127814[sp]P26434[NAH4_RAT SO	3.4
	433791	AA719352	Hs.112718	ESTs	3.4

	405238		Target Exon	3.4	
	412986	X81120	Hs.75110	cannabinoid receptor 1 (brain)	3.4
	414372	AA143654		gb:zo65a02.r1 Stratagene pancreas (93720	3.4
5	435523	T62849	Hs.11090	membrane-spanning 4-domains, subfamily A	3.4
	406739	AI566709	Hs.182426	ribosomal protein S2	3.4
	442710	AI015631	Hs.23210	ESTs	3.4
	452526	W38537	Hs.280740	hypothetical protein MGC3040	3.4
	456060	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fs, clone MA	3.4
10	435005	U80743	Hs.306094	trinucleotide repeat containing 12	3.4
	421674	T10707	Hs.296355	hypothetical protein FLJ23138	3.4
	425242	D13635	Hs.155287	KIAA0010 gene product	3.4
	436805	AA731533	Hs.270751	ESTs	3.4
	418641	BE243138	Hs.86947	a disintegrin and metalloproteinase doma	3.4
	430809	AI791150	Hs.262009	ESTs, Moderately similar to I38022 hypot	3.4
15	428878	AA436884	Hs.48926	ESTs	3.3
	413774	AA131782	Hs.182314	ESTs	3.3
	400533			ENSP00000209376::PRED65 protein (Fragmen	3.3
	422448	AW372922	Hs.116774	Integrin, alpha 1	3.3
20	423905	AW579960	Hs.135150	lung type-I cell membrane-associated gly	3.3
	430637	BE160081	Hs.256290	S100 calcium-binding protein A11 (calgiz	3.3
	427899	AA829286	Hs.332053	serum amyloid A1	3.3
	434206	AW136973	Hs.180479	ESTs, Weakly similar to S69890 mitogen i	3.3
	453387	AI990741	Hs.252809	ESTs	3.3
25	436265	AA731331	Hs.190668	ESTs	3.3
	412971	AA889628	Hs.35125	ESTs	3.3
	441701	AW339828	Hs.127497	ESTs	3.3
	418967	NM_001725	Hs.89535	bactericidal/permeability-increasing pro	3.3
	434577	R37316	Hs.179769	Homo sapiens cDNA: FLJ22487 fs, clone H	3.3
30	418216	AA662240	Hs.283099	AF15q14 protein	3.3
	436137	AI066769	Hs.133512	ESTs	3.3
	428715	AW293716	Hs.53126	ESTs	3.3
	449249	T52285	Hs.193115	Homo sapiens mRNA for KIAA1764 protein,	3.3
	440074	AA863045	Hs.10669	ESTs, Weakly similar to T00050 hypotheti	3.3
35	405046			C3000978.gi9280045[gb]BAB01579.1 (AB0	3.3
	437816	AI823445	Hs.280699	ESTs	3.3
	401272			C9000559.gi12314195[jemb]CAB99338.1 (A	3.3
	408896	AI610447	Hs.48778	ribon protein	3.3
	432343	NM_002960	Hs.2961	S100 calcium-binding protein A3	3.3
40	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfot	3.3
	439978	BE139460	Hs.124673	Homo sapiens cDNA FLJ11477 fs, clone HE	3.3
	421094	AW978202	Hs.269064	hypothetical protein FLJ22251	3.3
	428722	U76456	Hs.190787	tissue inhibitor of metalloproteinase 4	3.3
	446134	AW181234	Hs.13993	TBP-like 1	3.3
45	412281	AI810054	Hs.14119	ESTs	3.3
	436282	R91913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	3.3
	452203	X57622		transporter 1, ATP-binding cassette, sub	3.3
	421307	BE539976	Hs.103305	Homo sapiens mRNA; cDNA DKFZp43480425 (I	3.3
	409463	AI458165	Hs.17296	hypothetical protein MGC2376	3.3
50	411565	AW851728		gb:MR2-CT0222-011199-007-006 CT0222 Homo	3.3
	410422	AL042014	Hs.63348	Homo sapiens, clone MGC:15203, mRNA, com	3.3
	450506	NM_004460		fibroblast activation protein, alpha	3.3
	451254	AI571016	Hs.172967	ESTs	3.3
	423784	AK000039	Hs.132826	Homo sapiens cDNA FLJ14913 fs, clone PL	3.3
55	433325	AW206986	Hs.143905	ESTs	3.3
	419896	Z99362		gb:HSZ99362 DKFZphamy1 Homo sapiens cDNA	3.3
	420552	AK000492	Hs.98806	hypothetical protein	3.3
	451778	AI826131	Hs.62954	ESTs, Weakly similar to zinc finger prot	3.3
	427584	BE410293	Hs.179718	v-myb avian myeloblastosis viral oncogen	3.2
60	433507	AI817338	Hs.191791	ESTs	3.2
	418661	NM_001949	Hs.1189	E2F transcription factor 3	3.2
	440933	AI208217	Hs.142879	ESTs	3.2
	426746	J03626	Hs.2057	uridine monophosphate synthetase (orotat	3.2
65	404120			C5000537.gi3298595[gb]AAC41376.1 (AF0	3.2
	453920	AI133148	Hs.36602	I factor (complement)	3.2
	437014	AA808757	Hs.222531	ESTs, Weakly similar to S59501 Interfero	3.2
	424479	AF064238	Hs.149098	smoothelin	3.2
	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	3.2
	425922	AL157466	Hs.162751	Homo sapiens mRNA; cDNA DKFZp761E2423 (I	3.2
70	407304	AA565832	Hs.271649	gb:32b03.a1 NCI_CGAP_AA1 Homo sapiens	3.2
	411671	BE049094		ESTs	3.2
	420352	BE256835		gb:601117374F1 NIH_MGC_16 Homo sapiens c	3.2
	454765	AW819629		gb:RCS-ST0293-140200-014-H05 ST0293 Homo	3.2
	410407	X66839	Hs.63287	carbonic anhydrase IX	3.2
75	412490	AW803564	Hs.288850	Homo sapiens cDNA: FLJ22528 fs, clone H	3.2
	434563	AW083994	Hs.9469	pleckstrin homology domain-containing, f	3.2
	417124	BE122762	Hs.25338	ESTs	3.2
	407378	AA299264	Hs.57776	ESTs, Moderately similar to I38022 hypot	3.2
	439764	T26535	Hs.22744	hypothetical protein MGC13105	3.2
80	445936	BE643594	Hs.61478	hypothetical protein FLJ23229	3.2
	446523	NM_003063	Hs.334629	sarcoplipin	3.2
	406060			Target Exon	3.2
	432250	AA452088	Hs.274170	Opa-interacting protein 2	3.2
	437269	AA334384	Hs.149420	ESTs	3.2

5	449115	AW959952	Hs.37528	ESTs, Weakly similar to AF090944.1 PRO06	3.2
	425146	AW954627		gb:EST366697 MAGE resequences, MAGC Homo	3.2
	436210	AJ825420	Hs.197824	ESTs	3.2
	437698	R61837	Hs.7990	ESTs, Moderately similar to I84505 calci	3.2
	444371	BE540274	Hs.239	forkhead box M1	3.2
	410006	AW732308	Hs.57783	eukaryotic translation initiation factor	3.2
	445828	F05802	Hs.81907	ESTs	3.2
10	450810	BE207588	Hs.334360	transforming growth factor beta 1 induce	3.2
	439533	W76021		gb:zd64c04.r1 Soares_fetal_heart_NbMH19W	3.2
	418079	RA0058	Hs.6911	ESTs	3.2
	418781	T41160	Hs.8404	ESTs	3.2
	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	3.2
	431319	AA873350	Hs.302232	ESTs	3.2
15	445413	AA151342	Hs.12677	CGI-147 protein	3.2
	424947	R77952		ESTs, Weakly similar to alternatively sp	3.2
	429490	AJ971131	Hs.23889	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.2
	426765	AA743603	Hs.172108	nucleoporin 88kD	3.2
	419726	U50330	Hs.1274	bone morphogenetic protein 1	3.2
20	425849	AJ000512	Hs.296323	serumglucocorticoid regulated kinase	3.1
	439566	AF086387		gb:Homo sapiens full length Insert cDNA	3.1
	452574	AF127481	Hs.301946	lymphoid blast crisis oncogene	3.1
	439753	BE262233	Hs.7423	hypothetical protein from EUROIMAGE 2168	3.1
	435256	AF193768	Hs.13872	cytokine-like protein C17	3.1
25	439570	T79925	Hs.269165	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.1
	443431	AJ056847	Hs.20654	ESTs	3.1
	428289	M26301	Hs.2253	complement component 2	3.1
	415849	R20529	Hs.6806	ESTs	3.1
	419652	AL157485	Hs.91973	hypothetical protein	3.1
30	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytactin)	3.1
	457579	AB030816	Hs.36761	HRAS-like suppressor	3.1
	420579	AA278449	Hs.137429	ESTs	3.1
	408116	AA251393	Hs.289052	Homo sapiens, Similar to RIKEN cDNA 5430	3.1
	408247	AA053451	Hs.225632	leucine zipper protein 3	3.1
35	405183			NM_016358*Homo sapiens iroquois homeobo	3.1
	420676	AI434780	Hs.4248	vav 2 oncogene	3.1
	440286	U29589	Hs.7138	cholinergic receptor, muscarinic 3	3.1
	431176	AJ026984	Hs.293662	ESTs	3.1
	417918	AA209205	Hs.163754	hypothetical protein FLJ12606	3.1
40	437945	T78519		gb:yd58c08.r1 Soares fetal liver spleen	3.1
	404632			NM_022490:Homo sapiens hypothetical prot	3.1
	428917	AA437337	Hs.16689	ESTs	3.1
	428940	W25215		gb:zb87a09.r1 Soares_senescent_fibroblas	3.1
	444018	AA448154		gb:zw82h09.r1 Soares_testis_NHT Homo sap	3.1
45	430701	AJ760833	Hs.293971	ESTs	3.1
	402229	BE262804		mitochondrial ribosomal protein S2	3.1
	454177	AW807321		gb:MR4-ST0062-240300-003-g05 ST0062 Homo	3.1
	400090			Eos Control	3.1
	419326	W94915	Hs.42419	ESTs	3.1
50	435644	AA700867	Hs.269659	ESTs	3.1
	433042	AW193534	Hs.281895	Homo sapiens cDNA FLJ11660 fis, clone HE	3.1
	458810	BE407125	Hs.231510	ESTs	3.1
	414403	AW969551	Hs.76064	ribosomal protein L27a	3.1
	449670	F07693	Hs.85603	Homo sapiens mRNA; cDNA DKFZp434K2172 (f	3.1
55	403268			C1001737*gi7511201 pir J727904 hypothe	3.1
	430535	AW968485		gb:EST380561 MAGE resequences, MAGJ Homo	3.1
	455899	BE155112		gb:PM1-HT0350-151299-003-a03 HT0350 Homo	3.1
	432044	AW972727		gb:EST384819 MAGE resequences, MAGL Homo	3.1
	443105	X96753	Hs.9004	chondroitin sulfate proteoglycan 4 (mela	3.1
60	423789	AK002084	Hs.132851	hypothetical protein FLJ11222	3.1
	439538	AA837323	Hs.56407	ESTs	3.1
	437681	AI207958	Hs.166556	Homo sapiens, Similar to TEA domain fami	3.1
	433577	AW007080	Hs.284192	ESTs	3.1
	443021	AA368546	Hs.8904	Ig superfamily protein	3.1
65	433894	AJ907682	Hs.243293	ESTs	3.1
	414884	R54418	Hs.183745	hypothetical protein FLJ13456	3.1
	408996	AJ979168	Hs.344096	glycoprotein (transmembrane) nmb	3.1
	449162	AI632740	Hs.10478	ESTs	3.1
	417893	AA290605	Hs.190002	ESTs	3.1
70	433578	BE336886	Hs.3416	adipose differentiation-related protein	3.0
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	3.0
	450756	AJ733488	Hs.144062	ESTs	3.0
	422631	BE218919	Hs.118793	hypothetical protein FLJ10688	3.0
	414733	BE514535	Hs.77171	minichromosome maintenance deficient (S.	3.0
75	431019	NM_005249	Hs.2714	forkhead box G18	3.0
	434503	T98231	Hs.17762	ESTs	3.0
	455481	AW948317		gb:RC0-MT0015-280300-021-a09 MT0015 Homo	3.0
	427413	BE547847	Hs.177781	hypothetical protein MGC5618	3.0
	414396	BE548266	Hs.76057	galactose-4-epimerase, UDP-	3.0
80	458760	AJ458631	Hs.111334	territin, light polypeptide	3.0
	410555	U92649	Hs.64311	a disintegrin and metalloproteinase doma	3.0
	411543	AW851248		gb:IL3-CT0220-160200-066-F01 CT0220 Homo	3.0
	435375	AJ733610	Hs.187832	ESTs	3.0
	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	3.0

	432065	AA401039	Hs.2903	protein phosphatase 4 (formerly X), cata	3.0
	443338	R99575	Hs.302908	ESTs	3.0
	433062	AK001757	Hs.281348	hypothetical protein FLJ10895	3.0
5	412135	AW895309		gb:QV4-NN0038-300300-155-e07 NN0038 Homo	3.0
	418669	U85992	Hs.87197	Human clone IMAGE:35527 unknown protein	3.0
	443385	A850471	Hs.347290	ESTs	3.0
	426384	AA72078	Hs.303662	hypothetical protein FLJ13189 (FLJ13189)	3.0
	436267	AW450938	Hs.180115	ESTs	3.0
10	440388	AI693520	Hs.223000	ESTs	3.0
	427235	AI126288	Hs.192232	ESTs	3.0
	420116	NM_013241	Hs.95231	FH1/FH2 domain-containing protein	3.0
	419764	BE262524	Hs.83183	vasodilator-stimulated phosphoprotein	3.0
	405673	M34996	Hs.198253	major histocompatibility complex, class	3.0
15	445921	AW015211	Hs.146181	ESTs	3.0
	427695	R88483	Hs.172662	ESTs	3.0
	453324	W26592	Hs.232089	ESTs	3.0
	404272			Target Exon	3.0
	428538	AA446440	Hs.98543	ESTs	3.0
20	442786	H50733	Hs.256261	ESTs, Moderately similar to ALU8_HUMAN A	3.0
	444396	T65213	Hs.4257	ESTs	3.0
	440483	AI200836	Hs.150386	ESTs	3.0
	429973	AA23317	Hs.164680	ESTs	3.0
	450125	AA005418	Hs.158186	ESTs	3.0
25	417409	BE272506	Hs.82109	syndecan 1	3.0
	429569	AA454993	Hs.138343	ESTs, Weakly similar to I78885 serine/th	3.0
	455778	BE088748		gb:CM2-BT0693-210300-123-d09 BT0693 Homo	3.0
	427954	J03060	Hs.247551	metaxin 1	3.0
	422418	AK001383	Hs.116385	hypothetical protein FLJ10521	3.0
30	427527	AI809057	Hs.293441	immunoglobulin heavy constant mu	3.0
	416677	T83470	Hs.334840	ESTs, Moderately similar to I78885 serin	3.0
	451130	AI762250	Hs.345554	ESTs	3.0
	431431	AL096711	Hs.252953	Human DNA sequence from clone RP3-403A15	3.0
	425248	AW957442	Hs.252766	ESTs	3.0
35	422757	AI909935	Hs.65551	Homo sapiens, Similar to DNA segment, Ch	3.0
	431836	AF178532	Hs.271411	beta-site APP-cleaving enzyme 2	3.0
	416355	H49875	Hs.268906	ESTs	3.0
	426406	AI742501	Hs.169756	complement component 1, s subcomponent	3.0
	419829	AI924228	Hs.115185	ESTs, Moderately similar to PC4259 leni	3.0
40	412646	NM_006825	Hs.74368	transmembrane protein (53kD), endoplasmic	2.9
	423869	BE409301	Hs.134012	C1q-related factor	2.9
	422710	AW936566	Hs.201876	ESTs	2.9
	445906	N28939	Hs.13434	Homo sapiens clone 24418 mRNA sequence	2.9
	429751	M55210	Hs.214982	laminin, gamma 1 (formerly LAMB2)	2.9
45	430413	AW842182	Hs.241392	small inducible cytokine A5 (RANTES)	2.9
	443433	R44743	Hs.301667	ESTs	2.9
	444145	BE153823	Hs.282385	ESTs, Weakly similar to 2004399A chromos	2.9
	425262	D87119	Hs.155418	GS3955 protein	2.9
	442476	AF069475		gb:AF069475 Homo sapiens astrocytoma lib	2.9
50	443381	AI792628	Hs.133273	ESTs	2.9
	427144	X95097	Hs.2126	vasoactive intestinal peptide receptor 2	2.9
	415709	AA649850	Hs.278558	ESTs	2.9
	453385	AW296101	Hs.252806	ESTs	2.9
	442609	AL020996	Hs.8518	selenoprotein N	2.9
55	443378	AW392550	Hs.9280	proteasome (prosome, macropain) subunit,	2.9
	414416	AW409985	Hs.76084	hypothetical protein MGC2721	2.9
	443502	AI074528	Hs.133949	ESTs	2.9
	444143	AW747996	Hs.160999	ESTs, Moderately similar to A56194 throm	2.9
	418308	AW291942	Hs.23628	3 beta-hydroxy-delta 5-C27-steroid oxido	2.9
60	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	2.9
	408989	AW361666	Hs.49500	KIAA0746 protein	2.9
	427418	AA402587	Hs.325520	LAT1-3TM protein	2.9
	408788	AL134947	Hs.213956	Homo sapiens BAC clone RP11-10205 from Y	2.9
	426827	AW067805	Hs.172665	methyltetrahydrofolate dehydrogenase	2.9
65	403290			C10001011::gil4758212refNP_004411.1] d	2.9
	430890	X54232	Hs.2699	glypican 1	2.9
	441217	AI922183	Hs.213246	ESTs	2.9
	418287	AI872319	Hs.78935	methionine aminopeptidase; eIF-2-associ	2.9
	443836	BE221613	Hs.140553	ESTs	2.9
70	451527	AF022813	Hs.26518	transmembrane 4 superfamily member 7	2.9
	418110	R43523	Hs.217754	hypothetical protein FLJ22202	2.9
	420886	AA805453		ESTs, Weakly similar to T29012 hypothe	2.9
	439379	AA835002	Hs.125611	ESTs	2.9
	426197	AA004410	Hs.100009	acyl-Coenzyme A oxidase 1, palmitoyl	2.9
75	408679	AA070785		gb:zm66b07.r1 Stratagene neuroepithelium	2.9
	454120	AB032990	Hs.40719	hypothetical protein KIAA1164	2.9
	457244	AA581385	Hs.162473	ESTs, Weakly similar to I38022 hypothe	2.9
	432036	AF224266	Hs.272373	interleukin 20	2.9
	457364	AW971037		gb:EST383123 MAGE resequences, MAGK Homo	2.9
80	437860	AA333063	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	2.9
	453544	AA831785	Hs.171914	Homo sapiens cDNA: FLJ14209 fs, clone NT	2.9
	454968	AW849046		gb:IL3-CT0214-150300-085-H08 CT0214 Homo	2.9
	437528	N59646	Hs.169745	crumbs (Drosophila) homolog 1	2.9
	400850			Target Exon	2.9

5	428896	AW291932	Hs.58936	ESTs	2.9
	426140	AF131798	Hs.343768	Homo sapiens clone 25119 mRNA sequence	2.9
	408872	AW76139	Hs.13291	ESTs	2.9
	414799	AJ752416	Hs.77326	insulin-like growth factor binding prote	2.9
	406646	M33600	Hs.308026	major histocompatibility complex, class	2.9
	416569	H64891		gb:yr68h03.r1 Soares fetal liver spleen	2.9
	439130	AA306090	Hs.124707	ESTs	2.9
	451433	AA021140	Hs.269265	ESTs, Weakly similar to A46010 X-linked	2.9
10	430314	AA369601	Hs.239138	pre-B-cell colony-enhancing factor	2.9
	424308	AW975531	Hs.154443	minichromosome maintenance deficient (S.	2.9
	420172	AA601122	Hs.95655	secreted and transmembrane 1	2.9
	442485	BE092265	Hs.29724	hypothetical protein FLJ13187	2.9
	416505	H66470	Hs.16004	ESTs	2.9
15	415198	AW009480	Hs.943	natural killer cell transcript 4	2.9
	420674	NM_000055	Hs.1327	butyrylcholinesterase	2.9
	452139	AA099869	Hs.16331	Homo sapiens cDNA: FLJ21482 fs, clone C	2.8
	447499	AW262580	Hs.147674	protocadherin beta 16	2.8
	411373	BE326276	Hs.8861	ESTs	2.8
20	456816	AK001509	Hs.144391	hypothetical protein FLJ10647	2.8
	414232	W86946	Hs.238246	hypothetical protein FLJ22479	2.8
	416188	BE157260	Hs.79070	v-myc avian myelocytomatosis viral oncog	2.8
	447733	AF157482	Hs.19400	MAD2 (mitotic arrest deficient, yeast, h	2.8
	438624	AA889055	Hs.123488	ESTs	2.8
25	452102	U04343	Hs.27954	CD86 antigen (CD28 antigen ligand 2, B7-	2.8
	408716	AJ567839	Hs.151714	Homo sapiens mRNA for KIAA1769 protein,	2.8
	424028	AF055084	Hs.153692	Homo sapiens cDNA FLJ14354 fs, clone Y7	2.8
	421679	AJ475110	Hs.203833	ESTs	2.8
	450651	W79000	Hs.44545	ESTs, Weakly similar to B34087 hypotheti	2.8
30	452785	AL359942	Hs.296434	erythroid differentiation and dendrocyte	2.8
	432842	AW674093	Hs.334822	hypothetical protein MGC4485	2.8
	403291			Target Exon	2.8
	453096	AW294631	Hs.11325	ESTs	2.8
35	422545	X02761	Hs.287820	fibronectin 1	2.8
	440296	D30829	Hs.180610	splicing factor protein/glutamine rich (	2.8
	427154	AL137262	Hs.325630	hypothetical protein MGC4269	2.8
	422282	AF019225	Hs.114309	apoptoprotein L	2.8
	434868	R50032	Hs.159263	collagen, type VI, alpha 2	2.8
40	414727	BE466904	Hs.190162	gb:hz28f03.x1 NC1_CGAP_GC6 Homo sapiens	2.8
	437437	AA226869		hypothetical protein DKFZp762L0311	2.8
	427722	AK000123	Hs.180479	hypothetical protein FLJ20116	2.8
	443623	AA345519	Hs.9641	complement component 1, q subcomponent,	2.8
	444006	BE395085	Hs.10086	type I transmembrane protein Fn14	2.8
	448432	AJ783586	Hs.208575	ESTs	2.8
45	453682	T79703		gb:yd71e08.r1 Soares fetal liver spleen	2.8
	447527	AJ702896	Hs.42091	ESTs	2.8
	418557	BE140602	Hs.246645	ESTs	2.8
	409157	AA064631		gb:zf72c03.s1 Soares_pineal_gland_N3HPG	2.8
	457653	AJ820719	Hs.154662	DnaJ (Hsp40) homolog, subfamily A, membe	2.8
50	456908	AJ953671	Hs.220994	hypothetical protein FLJ14129	2.8
	439220	AW295340	Hs.130417	ESTs, Weakly similar to Z195_HUMAN ZINC	2.8
	418312	AW972468	Hs.170307	Raf guanine nucleotide exchange factor R	2.8
	454581	AW809189		gb:MR4-ST0118-261099-012-e10 ST0118 Homo	2.8
	419169	AW851980	Hs.262346	ESTs, Weakly similar to S72482 hypotheti	2.8
55	400645			Target Exon	2.8
	413951	AW051200	Hs.75840	natriuretic peptide precursor A	2.8
	441360	AJ091713	Hs.106597	Homo sapiens, Similar to RIKEN cDNA 1110	2.8
	404150			Target Exon	2.8
	402936			ENSP00000217246*:DJ803K15.1 (novel prote	2.8
60	454457	AW753456		gb:OV2-CT0261-261099-011-011 CT0261 Homo	2.8
	439544	W26354	Hs.28891	hypothetical protein FLJ11360; artemis p	2.8
	403969			ENSP00000034663:Zinc finger protein 131	2.8
	447183	AJ554733	Hs.173182	ESTs	2.8
	446566	H95741	Hs.17914	membrane-spanning 4-domains, subfamily A	2.8
65	426141	C05886	Hs.293972	ESTs	2.8
	440148	AW014231	Hs.90790	Homo sapiens cDNA: FLJ22930 fs, clone K	2.8
	430335	D80007	Hs.239499	KIAA0185 protein	2.8
	447071	AW236887	Hs.244376	ESTs	2.8
	428899	AA744610	Hs.194431	palladin	2.8
70	400658			ENSP00000237081*:KIAA1217 PROTEIN (FRAGM	2.8
	403942			Target Exon	2.8
	420565	AJ806770	Hs.30258	ESTs	2.8
	409734	BE161664	Hs.56155	hypothetical protein	2.8
	456645	AF227156	Hs.110103	RNA polymerase I transcription factor RR	2.8
75	401841			NM_015113:Homo sapiens KIAA0399 protein	2.8
	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13090 fs, clone NT	2.8
	450150	AJ754391	Hs.23510	Kruppel-like factor 12	2.8
	409154	U72882	Hs.50842	interferon-induced protein 35	2.8
	410267	AW978005	Hs.12600	N-ethylmaleimide-sensitive factor attach	2.8
80	448224	R48700	Hs.20733	Homo sapiens cDNA: FLJ22356 fs, clone H	2.8
	410268	AA316181	Hs.61635	six transmembrane epithelial antigen of	2.8
	447512	AW958148	Hs.129454	ESTs	2.8
	417749	U09196	Hs.82520	polymerase (DNA-directed), delta 4	2.8
	415293	R49462	Hs.106541	ESTs	2.8

	416207	NM_014745	Hs.79077	Homo sapiens, clone MGC:2908, mRNA, comp	2.8
	423337	NM_004655	Hs.127337	axon 2 (conductin, axl)	2.8
	425128	BE561929	Hs.154718	tumor protein DS2-like 2	2.7
5	444491	AI151091	Hs.270714	ESTs	2.7
	428311	NM_005651	Hs.183671	tryptophan 2,3-dioxygenase	2.7
	430377	NM_001922	Hs.301865	dopachrome tautomerase (dopachrome delta	2.7
	417944	AU077196	Hs.82985	collagen, type V, alpha 2	2.7
	444153	AK001610	Hs.10414	hypothetical protein FLJ10748	2.7
10	438138	R98299	Hs.177502	ESTs	2.7
	425421	L11689	Hs.157145	tetracycline transporter-like protein	2.7
	431070	AW408164	Hs.249184	transcription factor 19 (SC1)	2.7
	451748	AK001612	Hs.26962	Homo sapiens cDNA FLJ10750 fs, clone NT	2.7
	452085	AW239140	Hs.25614	ESTs, Weakly similar to PC4396 mucin 3 T	2.7
	405941			Target Exon	2.7
15	417395	BE564245	Hs.82084	integrin beta 3 binding protein (beta3-e	2.7
	449667	AB023227	Hs.23860	KIAA1010 protein	2.7
	428808	AA436007	Hs.188780	ESTs	2.7
	425843	BE313280	Hs.159627	death associated protein 3	2.7
20	438025	AW501360	Hs.258910	ESTs	2.7
	400924			Target Exon	2.7
	412898	AI129903	Hs.74669	vesicle-associated membrane protein 5 (m	2.7
	413834	BE296896	Hs.224179	ESTs, Weakly similar to I38022 hypothes	2.7
	453785	AI368236	Hs.283732	ESTs, Moderately similar to ALU1_HUMAN A	2.7
25	406736	AI254733	Hs.182426	ribosomal protein S2	2.7
	414280	BE410769	Hs.75873	zyxin	2.7
	434203	BE262677	Hs.283558	hypothetical protein PRO1855	2.7
	442621	AI004333	Hs.130553	ESTs, Weakly similar to ALUA_HUMAN !!!	2.7
	414591	AI888490	Hs.55902	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.7
30	416547	H62914	Hs.268946	ESTs, Weakly similar to PC4259 ferritin	2.7
	416784	AA334592	Hs.79914	lumican	2.7
	413851	AW897510	Hs.137387	ESTs	2.7
	451767	AI625014	Hs.187328	ESTs	2.7
	441668	AI611973	Hs.136313	ESTs	2.7
35	435654	AI032087	Hs.269819	ESTs	2.7
	435046	AA662772	Hs.174330	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.7
	439467	AW292275	Hs.158365	ESTs	2.7
	441329	AI203575	Hs.46821	hypothetical protein FLJ20086	2.7
	426925	NM_001196	Hs.315689	Homo sapiens cDNA: FLJ22373 fs, clone H	2.7
40	427241	AA399988	Hs.112087	Human DNA sequence from clone RP11-530N1	2.7
	449919	AI674685	Hs.200141	ESTs	2.7
	458070	AW503578	Hs.209406	ESTs, Weakly similar to I38600 zinc fing	2.7
	444794	AI419991	Hs.145225	ESTs	2.7
	410781	AI375672	Hs.165028	ESTs	2.7
45	449520	R34993	Hs.226666	ESTs, Moderately similar to I54374 gene	2.7
	439481	AF086294	Hs.125844	ESTs	2.7
	401702			NM_001171*:Homo sapiens ATP-binding cass	2.7
	432890	NM_014442	Hs.279751	sialic acid binding lg-like lectin 8	2.7
	435545	AA687415	Hs.28107	ESTs	2.7
50	416422	H60457		ESTs, Moderately similar to ZN91_HUMAN Z	2.7
	429415	NM_002593	Hs.202097	procollagen C-endopeptidase enhancer	2.7
	420982	AW576160	Hs.100729	KIAA0692 protein	2.7
	431421	AW969118	Hs.108144	ESTs, Weakly similar to unnamed protein	2.7
	444168	AW379879		gb:RC1-HT0256-081199-011-01 HT0256 Homo	2.7
55	419964	AA811657	Hs.220913	ESTs	2.7
	424480	AA341442	Hs.205299	ESTs	2.7
	436314	AI983409	Hs.189226	ESTs	2.7
	405616			ENSP00000200457*:Thyroid receptor intera	2.7
	449340	AW235786	Hs.185359	hypothetical protein MGC10954	2.7
60	457876	AI821940		ESTs, Moderately similar to ALU8_HUMAN A	2.7
	423799	AW026300	Hs.132906	19A24 protein	2.7
	422551	AW967284		gb:EST379359 MAGE resequences, MAGJ Homo	2.7
	404592			NM_022739*:Homo sapiens E3 ubiquitin lig	2.7
	424200	AA337221		gb:EST41944 Endometrial tumor Homo sapie	2.7
65	428612	AA770001	Hs.188778	ESTs	2.7
	446139	H77395	Hs.39749	ESTs	2.7
	440478	AI733047	Hs.130005	ESTs	2.7
	429612	AF062649	Hs.252587	pituitary tumor-transforming 1	2.7
	422530	AW972300	Hs.118110	bone marrow stromal cell antigen 2	2.7
70	423713	AW754182		gb:RC2-CT0321-131199-011-c01 CT0321 Homo	2.7
	402032			ENSP00000251056*:Plasma membrane calcium	2.7
	424186	AI538021	Hs.288706	Homo sapiens cDNA FLJ10281 fs, clone HE	2.7
	402799			Target Exon	2.7
	423352	AA324808	Hs.193576	ESTs	2.7
75	412021	AW885592		gb:RC4-OT0071-090300-011-g11 OT0071 Homo	2.7
	458617	Z25900	Hs.18724	Homo sapiens mRNA: cDNA DKFZp564F093 (fr	2.7
	404170			NM_000636*:Homo sapiens superoxide dismu	2.7
	410886	AW809324		gb:MRA-SY0121-141099-010-G06_1 ST0121 Ho	2.7
	414988	C17535		gb:C17535 Human placenta cDNA (TFujiwara	2.7
80	450325	AI935962	Hs.26289	ESTs	2.7
	458918	H56499	Hs.252692	ESTs, Weakly similar to I38022 hypothes	2.7
	405760			Target Exon	2.7
	406789	AI041403		ribosomal protein L29	2.7
	424686	AA345504		gb:EST51529 Gall bladder II Homo sapiens	2.7

	400335	Y13187	Hs.248068	Homo sapiens dmd gene, Intron 11	2.7
	435065	BE064391		gb:RC4-BT0310-110300-015-b08 BT0310 Homo	2.7
	419373	NM_003244	Hs.90077	TG-interacting factor (TALE family homeo	2.7
	406785	AA588061		gb:nk10603.s1 NCI_CGAP_Co2 Homo sapiens	2.7
5	433006	BE242758	Hs.190223	ESTs, Moderately similar to T29285 hypot	2.7
	428690	A1948490	Hs.98765	ESTs	2.7
	432692	AW974944	Hs.200577	ESTs	2.7
	439699	AF086534	Hs.187561	ESTs, Moderately similar to ALU1_HUMAN A	2.7
	452811	AA937079	Hs.118983	hypothetical protein FLJ12150	2.6
10	457035	AA398074	Hs.119143	ESTs, Moderately similar to KIAA1513 pro	2.6
	427725	U66839	Hs.180533	mitogen-activated protein kinase kinase	2.6
	433681	A1004377	Hs.200360	Homo sapiens cDNA FLJ13027 fs, clone NT	2.6
	423748	A1149048	Hs.30211	hypothetical protein FLJ22313	2.6
	422764	A1767727	Hs.47522	ESTs	2.6
15	403431			Target Exon	2.6
	439332	AW842747	Hs.300870	Homo sapiens mRNA; cDNA DKFZp547M072 (tr	2.6
	412749	AA378417	Hs.74564	signal sequence receptor, beta (transloc	2.6
	409703	NM_006187	Hs.56009	2'-5'-oligoadenylate synthetase 3 (100 k	2.6
20	405717			CX000838:gil10092633:ref NP_055314.1  pu	2.6
	426503	AA380153		gb:EST193093 Skin tumor 1 Homo sapiens cD	2.6
	414039	M83221	Hs.858	v-rel avian reticuloendotheliosis viral	2.6
	452683	A1089575	Hs.9071	progesterone membrane binding protein	2.6
	447587	AW292139	Hs.115789	ESTs	2.6
25	408605	AF025374	Hs.46465	T-cell, immune regulator 1	2.6
	407103	AA424881	Hs.256301	hypothetical protein MGC13170	2.6
	427395	AW298741	Hs.97861	ESTs, Moderately similar to I38022 hypot	2.6
	435113	AA665469	Hs.117136	ESTs	2.6
	419015	T79262	Hs.14463	ESTs	2.6
	427648	A1376722	Hs.180062	proteasome (prosome, macropain) subunit,	2.6
30	453707	AW003879	Hs.126522	Homo sapiens, clone MGC:16722, mRNA, com	2.6
	411927	BE274009	Hs.772	glycogen synthase 1 (muscle)	2.6
	404053			Target Exon	2.6
	415069	AA159831	Hs.29286	ESTs, Weakly similar to I49636 DNA-bindi	2.6
35	449625	NM_014253		odx (odd Oz/ten-m, Drosophila) homolog 1	2.6
	438033	T26483	Hs.6059	ECF-containing fibulin-like extracellular	2.6
	451593	AF151879	Hs.26706	CGI-121 protein	2.6
	435828	AA700705	Hs.13852	ESTs	2.6
	443753	AW367578	Hs.134749	ESTs	2.6
40	416097	BE387371	Hs.118964	hypothetical protein FLJ20085	2.6
	413986	Z43567		gb:HSC1FC021 normalized infant brain cDN	2.6
	439755	AW748482	Hs.77873	B7 homolog 3	2.6
	408371	AF161545	Hs.44439	hypothetical protein	2.6
	445658	AA690662	Hs.172660	ESTs	2.6
45	438166	N30158	Hs.122645	ESTs	2.6
	449426	T92251	Hs.198882	ESTs	2.6
	422605	H16846		hypothetical protein PP591	2.6
	415788	AW628686	Hs.78851	KIAA0217 protein	2.6
	448966	AW372914	Hs.86149	phosphoinositol 3-phosphate-binding prot	2.6
50	400295	W72838		A1905687:IL-BT095-190199-019 BT095 Homo	2.6
	441128	AA570256		ESTs, Weakly similar to T23273 hypotheti	2.6
	420372	AW960049	Hs.293660	Homo sapiens, clone IMAGE:3535476, mRNA,	2.6
	428977	AK001404	Hs.194698	cyclin B2	2.6
	424278	AK000723	Hs.144517	hypothetical protein FLJ20716	2.6
55	445211	BE045601	Hs.118248	ESTs, Weakly similar to YC18_HUMAN HYPOT	2.6
	412715	NM_000947	Hs.74519	primase, polypeptide 2A (58kD)	2.6
	417838	R24713	Hs.22514	ESTs	2.6
	420670	AW973577		ESTs	2.6
	403267			Target Exon	2.6
60	454354	AW389896		gb:RC4-ST0173-191099-032-e12 ST0173 Homo	2.6
	452903	A953425	Hs.345291	ESTs, Weakly similar to I38022 hypotheti	2.6
	427830	AA416598	Hs.98233	ESTs	2.6
	435953	A1767087	Hs.114142	ESTs	2.6
	430744	AA485229	Hs.105649	ESTs	2.6
65	413335	A1613318	Hs.48442	ESTs	2.6
	416370	N90470	Hs.203697	ESTs, Weakly similar to I38022 hypotheti	2.6
	431865	AA521106	Hs.136375	ESTs, Weakly similar to S65824 reverse t	2.6
	434274	AA528539	Hs.116252	ESTs, Moderately similar to ALU1_HUMAN A	2.6
	447854	AW138454	Hs.11594	ESTs	2.6
70	412799	A1267606		gb:ag91h03.x1 Stanley Frontal SB pool 1	2.6
	455409	AW936832		gb:PM2-DT0023-050400-003-h03 DT0023 Homo	2.6
	408212	AA297567	Hs.43728	hypothetical protein	2.6
	453055	AW291436	Hs.31917	Homo sapiens, clone MGC:9658, mRNA, comp	2.6
	443539	A1076182	Hs.134074	ESTs, Moderately similar to ALU6_HUMAN A	2.6
75	434898	AW500458	Hs.29956	KIAA0460 protein	2.6
	438118	AW753311	Hs.346690	ESTs	2.6
	431786	AW452784	Hs.220718	ESTs	2.6
	421689	N87820	Hs.106826	KIAA1696 protein	2.6
	429597	NM_003816	Hs.2442	a disintegrin and metalloproteinase doma	2.6
80	424684	AW752714	Hs.5174	ribosomal protein S17	2.6
	439823	AW665287	Hs.124514	ESTs	2.6
	411962	AA099050		gb:zkb85d12.r1 Soares_pregnant_uterus_NbH	2.6
	445774	A1254165	Hs.339968	ESTs	2.6
	400492			C10001573:gil7302749 gb AAF57827.1  (AE	2.6

	450625	AW970107		gb:EST382188 MAGE resequences, MAGK Homo	2.6
	426931	NM_003416	Hs.2076	zinc finger protein 7 (KOX 4, clone HF.1	2.6
	440131	AJ023425	Hs.222225	ESTs	2.6
	438525	AW368528	Hs.100855	ESTs	2.6
5	412247	AF022375	Hs.73793	vascular endothelial growth factor	2.6
	406662	X62006	Hs.172550	polypyrimidine tract binding protein (the	2.6
	443725	AW245680	Hs.9701	growth arrest and DNA-damage-inducible,	2.6
	402260			NM_001436*:Homo sapiens fibrinogen (FBL	2.6
10	429599	AA806106	Hs.123664	ESTs	2.6
	429562	AJ732767	Hs.158101	Homo sapiens cDNA FLJ14673 fs, clone NT	2.6
	432527	AW975028	Hs.102754	ESTs	2.6
	434420	AA688278	Hs.194864	hypothetical protein FLJ22578	2.6
	452732	BE300078	Hs.80449	Homo sapiens, clone IMAGE:3535294, mRNA,	2.6
	424408	AJ754813	Hs.146428	collagen, type V, alpha 1	2.6
15	413151	H47969	Hs.141971	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.6
	416244	N39535	Hs.32748	ESTs	2.6
	403104			C8000064*:g[10432393]emb[CAC10283.1] (A	2.6
	400780			NM_007325*:Homo sapiens glutamate recept	2.6
20	433009	AA781668		gb:nz24c08.s1 NCI_CGAP_GCB1 Homo sapiens	2.6
	424090	X98699	Hs.139262	XAP associated factor-1	2.6
	403212			NM_018595:Homo sapiens intersecin 2 (IT	2.6
	407855	RS4126	Hs.40500	similar to S. cerevisiae RER1	2.6
	406849	AA454809	Hs.172928	collagen, type I, alpha 1	2.6
25	443462	AJ064690	Hs.171176	ESTs	2.6
	439563	AW247529	Hs.6793	platelet-activating factor acetylhydrolase	2.6
	450089	AJ681883	Hs.209546	ESTs, Weakly similar to 2109260A B cell	2.6
	419571	AW674962	Hs.91148	protein kinase D2	2.6
	448140	AF146761	Hs.20450	BCM-like membrane protein precursor	2.6
30	444881	AJ623288	Hs.192805	ESTs	2.6
	420658	AW965215	Hs.130707	ESTs	2.6
	437634	AW293046	Hs.255158	ESTs	2.6
	426894	AJ204209	Hs.143911	ESTs	2.6
	428467	AK002121	Hs.184465	hypothetical protein FLJ11259	2.6
35	434171	BE247688	Hs.347349	KIAA0948 protein	2.6
	410174	AA306007	Hs.59461	DKFZP434C245 protein	2.6
	427245	AA421022	Hs.97739	ESTs	2.5
	437085	AA743935	Hs.202329	ESTs	2.5
	400362	AF068294	Hs.272414	Homo sapiens HDCMB45P mRNA, partial cds	2.5
40	452221	C21322	Hs.288057	hypothetical protein FLJ22242	2.5
	439079	AF085937	Hs.38348	ESTs	2.5
	437287	AA748180	Hs.159346	hypothetical protein FLJ21369	2.5
	411852	AA528140	Hs.107515	ESTs, Weakly similar to T00329 hypotheti	2.5
	427624	AA406245	Hs.24895	ESTs	2.5
45	435177	AJ018174	Hs.42938	ESTs	2.5
	449433	AJ672096	Hs.9012	ESTs, Weakly similar to S26650 DNA-bindi	2.5
	447853	AJ434204	Hs.164285	ESTs, Weakly similar to AFG1_YEAST AFG1	2.5
	416704	H77795	Hs.39785	ESTs	2.5
	401686			Target Exon	2.5
50	445677	H96577	Hs.6838	ras homolog gene family, member E	2.5
	413840	AJ301558	Hs.146381	RNA binding motif protein, X chromosome	2.5
	437916	BE568249	Hs.20999	hypothetical protein FLJ23142	2.5
	420289	N55394	Hs.96398	8-oxoguanine DNA glycosylase	2.5
	421848	X15880	Hs.108885	collagen, type VI, alpha 1	2.5
55	421234	AA907153	Hs.190060	ESTs	2.5
	414598	AJ094221	Hs.135150	lung type-I cell membrane-associated gly	2.5
	420162	BE378432	Hs.95577	cyclin-dependent kinase 4	2.5
	458199	AW136417		hypothetical protein FLJ14464	2.5
	433523	H29882		ESTs	2.5
60	429125	AA446854	Hs.271004	ESTs, Weakly similar to I38022 hypotheti	2.5
	418399	AF131781	Hs.84753	hypothetical protein FLJ12442	2.5
	404748			ENSP00000238177*:Similar to kynurenine 3	2.5
	413507	BE145360	Hs.190064	ESTs, Weakly similar to I38022 hypotheti	2.5
	418886	AA993982	Hs.130858	ESTs	2.5
65	429359	W00482	Hs.2399	matrix metalloproteinase 14 (membrane-in	2.5
	452367	U71207	Hs.29279	eyes absent (Drosophila) homolog 2	2.5
	436258	AW867491	Hs.107125	plasmalemma vesicle associated protein	2.5
	459527	AW977556	Hs.291735	ESTs, Weakly similar to I78885 serine/th	2.5
	450543	AJ394037	Hs.170296	Homo sapiens cDNA: FLJ22090 fs, clone H	2.5
70	434818	AA650097	Hs.5996	ESTs	2.5
	444534	AW271626	Hs.42294	ESTs	2.5
	452113	AJ859393		gb:wm11a02.x1 NCI_CGAP_U4 Homo sapiens	2.5
	429115	AA446728	Hs.289020	Homo sapiens cDNA FLJ14098 fs, clone MA	2.5
	434012	AA621425	Hs.186256	ESTs	2.5
75	447143	AW292408	Hs.152290	ESTs, Highly similar to JC2463 vasoactiv	2.5
	449505	AJ653006	Hs.195374	ESTs	2.5
	419817	AA743434	Hs.193778	ESTs	2.5
	457986	AA781745	Hs.126920	Homo sapiens, clone IMAGE:4299555, mRNA,	2.5
	431454	AW975980	Hs.292918	ESTs	2.5
80	425018	BE245277	Hs.154196	E4F transcription factor 1	2.5
	427513	AA76318	Hs.192480	ESTs	2.5
	441318	AJ078234	Hs.176130	ESTs	2.5
	424830	AW270580	Hs.189311	ESTs, Weakly similar to putative p150 [H	2.5
	414271	AK000275	Hs.75871	protein kinase C binding protein 1	2.5



5	446089	AI880021	Hs.345028	ESTs, Moderately similar to A47582 B-cel	2.5
	415983	AI436798	Hs.117078	Homo sapiens cDNA: FLJ23028 fs, clone L	2.5
	408292	AW178363		gb:RC3-HT0105-010999-002-H06 HT0105 Homo	2.5
	446862	AV660697	Hs.282700	ESTs	2.5
	448970	AW138582		gb:U1-H-B11-act-a-06-0-U1.s1 NCI_CGAP_Su	2.5
	459200	Y09306	Hs.30148	homeodomain-interacting protein kinase 3	2.5
	422627	BE338857	Hs.118787	transforming growth factor, beta-induced	2.5
	433388	AI432672	Hs.288539	hypothetical protein FLJ22191	2.5
10	438222	AI208737	Hs.122810	Homo sapiens cDNA FLJ11489 fs, clone HE	2.5
	441255	R06350	Hs.171635	ESTs	2.5
	441627	AA947552	Hs.58086	branched chain aminotransferase 1, cytos	2.5
	438714	AA814859	Hs.294112	ESTs	2.5
	441020	W79283	Hs.35962	ESTs	2.5
15	418291	BE300369	Hs.289038	hypothetical protein MGC4126	2.5
	434267	AI206589	Hs.116243	ESTs	2.5
	446821	W03766		tropomodulin 3 (ubiquitous)	2.5
	402615			C1003844:gi6912550:trf[NP_038483.1] of	2.5
	416845	H95279	Hs.293788	gb:yu20h02.s1 Soares fetal liver spleen	2.5
20	408253	AW807476	Hs.21051	Homo sapiens mRNA for FLJ00012 protein,	2.5
	444884	AI201094	Hs.148540	ESTs	2.5
	440826	AW383518	Hs.346256	ESTs, Moderately similar to ALU2_HUMAN A	2.5
	431374	BE258532	Hs.251871	CTP synthase	2.5
	458093	AI207768	Hs.343628	sialyltransferase 4B (beta-galactosidase	2.5
25	422484	AA568770	Hs.123158	Homo sapiens cDNA FLJ12830 fs, clone NT	2.5
	442804	AW300118	Hs.131257	ESTs	2.5
	420949	AA934063	Hs.13836	ESTs, Weakly similar to I38022 hypothesi	2.5
	451350	AI791447		gb:nl13a05.y5 NCI_CGAP_Co4 Homo sapiens	2.5
30	410855	X97795	Hs.66718	RAD54 (S.cerevisiae)-like	2.5
	430426	AA478807	Hs.125173	ESTs	2.5
	418526	BE019020	Hs.85838	solute carrier family 16 (monocarboxylic	2.5
	406290			Target Exon	2.5
	442085	AA975688	Hs.159955	ESTs	2.5
35	448148	NM_016578	Hs.20509	HBV pX associated protein-8	2.5
	432888	T86823		gb:yd81a08.s1 Soares fetal liver spleen	2.5
	424126	AA335635	Hs.96917	ESTs	2.5
	459727	AI906484		gb:RC-BT113-060499-024 BT113 Homo sapien	2.5
	407989	AW135208	Hs.256092	ESTs	2.5
	404571			NM_015902: Homo sapiens progesteron induce	2.5
40	429139	F09092	Hs.66087	ESTs	2.5
	435232	NM_001262	Hs.4854	cyclin-dependent kinase inhibitor 2C (p1	2.5
	420608	BE548277	Hs.103104	ESTs	2.5
	432668	AA558601	Hs.43296	ESTs	2.5
	405871	AA993857	Hs.180842	ribosomal protein L13	2.5
45	443516	AA305821	Hs.9527	apoptosis related protein APR-3	2.5
	445885	BE621800	Hs.29444	putative small membrane protein NID67	2.5
	424614	X54488	Hs.151242	serine (or cysteine) proteinase inhibito	2.5
	437267	AW511443	Hs.258110	ESTs	2.5
	458251	AL040927	Hs.210422	ESTs	2.5
50	431198	AL047634	Hs.231913	ESTs	2.5
	413944	AW001579	Hs.9645	Homo sapiens mRNA for KIAA1741 protein,	2.5
	420796	L34355	Hs.99931	sarcoglycan, alpha (50kD dystrophin-asso	2.5
	428032	AW997704	Hs.11493	Homo sapiens cDNA FLJ13536 fs, clone PL	2.5
	422017	NM_003877	Hs.110776	STAT induced STAT inhibitor-2	2.5
55	424662	NM_002870	Hs.151536	RAB13, member RAS oncogene family	2.5
	423779	AW071837	Hs.57971	ESTs	2.5
	405863			Target Exon	2.5
	458421	AI279978	Hs.22547	ESTs	2.5
	439019	AF085902	Hs.271737	ESTs	2.5
60	412577	Z22968	Hs.74076	CD163 antigen	2.5
	404891			Target Exon	2.5
	419043	T19167	Hs.89566	ets variant gene 1	2.5
	448482	AW294078	Hs.171092	ESTs	2.5
	426030	BE243933	Hs.108642	zinc finger protein 22 (KOX 15)	2.5
65	429109	AL006637	Hs.196352	neutrophil cytosolic factor 4 (40kD)	2.5
	450597	AI701635	Hs.207077	ESTs	2.5
	414388	X00442	Hs.75990	haploglobin	2.5
	440473	BE562314	Hs.98711	Homo sapiens, clone IMAGE:3677165, mRNA,	2.5
	406851	AA609784		major histocompatibility complex, class	2.5
70	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	2.5
	417663	R07483	Hs.180461	ESTs	2.5
	429341	X73874	Hs.2393	phosphorylase kinase, alpha 1 (muscle)	2.5
	450663	H43540	Hs.25292	ribonuclease H1, large subunit	2.5
	407198	H91679		gb:yv04a07.s1 Soares fetal liver spleen	2.5
75	411742	AW247593	Hs.71819	eukaryotic translation initiation factor	2.5
	409449	H11341	Hs.13366	Homo sapiens cDNA: FLJ23567 fs, clone L	2.5

TABLE 14B:

Phy: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

Phy CAT Number Accession  
408292 1050507\_1 AW178363 AW846011 AW845964 AW845988 AW845977 AW846002

	409157	110363_1	AA064631 AA722000 AA064793
	409189	110687_1	AA125984 AA127189 AA065075 AA070377 AA100017 AA079891 AA113255 AA075168 AA082764 AA083380 N84829 AA084752 AA076512 AA085119
			AA085208 AA085045
5	410886	1225822_1	AW809324 BE144977 BE144956
	411537	1248899_1	BE073250 BE073378 BE073379 AW850533 AW850629
	411543	1249127_1	AW851248 AW851425 AW850805 AW851021 AW850905
	411565	1249756_1	AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628
	411671	125369_1	BE049094 AA700765 H86770 AA094646 R02483 C03868 N56170
10	411688	1254076_1	AW953440 T08189 AW857085
	411962	126744_1	AA099050 AA099526 T47733
	412021	1272156_1	AW885592 AW885594 AW885579 AW885651
	412135	1279148_1	AW895309 AW895290 AW895307 AW895397 AW895378 AW895402 AW895403 AW895311 AW895298 AW895390 AW895488 AW895468 AW895481
			AW895288
15	412799	132817_1	A1267506 AA121045 AA126521
	412811	132943_1	H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047862 Z41952 AW24991 A1693507 A1863108 AA599060 A1091148 AA598689
			R39887 AA813482 AW016452 H06383 R41807 A1384268 AA620528 AJ241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734
	413986	140720_1	Z43567 H24159 AA134240
	414372	143909_1	AA143654 AW753140 AA213770 AW970865 AA569075 AA492132
20	414988	1511318_1	C17535 D59244 D58878 D79090
	415131	1523680_1	D61119 D81508 D81734
	416422	1593811_1	H60457 H68709 H73528 H54335 R87154
	416569	1601567_1	H64891 R93444 R93458 R05590
	416871	1626761_1	H98716 N90792 N24283
25	416913	163001_1	AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499
	419896	1888662_1	Z99362 Z99363
	420352	192979_1	BE258835 AW968316 AA258918 AW843305 R14744 A1580388 BE071923 R36280
	420670	195442_1	AW973577 AA553621 AA279187
	420886	197344_1	AA805453 AA281379
30	422551	217767_1	AW967284 AA312192 AA312203
	423713	231290_1	AW754182 AW754198 AA329683
	424009	234177_1	F11690 AW965370 AA333586 D30830
	424200	236595_1	AA337221 AA336758 AW966196
	424686	242486_1	AA345504 AA345251 AW963243
35	424947	245247_1	R77952 AA348809 AW959960 AW959962 A1565552 AW070702 AA973910 R85973
	425146	247244_1	AW954627 AW954629 AA351258 R25935
	425331	250199_1	AW962128 AA355353 AA427363
	426503	268283_1	AA380153 AA380233 AW963529
	429163	300543_1	AA884766 AW974271 AA592975 AA447312
40	429940	310884_1	W25215 AA461079 AA461391
	430535	319643_1	AW968485 AW968670 AA480922 BE350425
	430968	326269_1	AW972830 AA527647 AA489820 AA570362
	432044	340773_1	AW972727 AA524829 AW972733
	432363	345469_1	AA534489 AW970240 AW970323
45	432888	355780_1	T86823 A1821425 A1732232 AA569589 AA570737
	433009	357371_1	AA761668 AA573621 R92814 R09670
	433523	368873_1	H29882 AW665533 AW149901 A1572917 AA598500 A1686466 A1336390 AW864390 AW864320
	433835	374758_1	A1806185 AA610083 A1693089 A1693075
	434589	38929_1	AF147363 T47219 T47218
50	435065	399329_1	BE064391 BE064395 AA663613 N99644
	435542	407744_1	AA687376 H74234 AW975503
	436608	42381_3	AA628980 A1126603 BE504035
	437034	431713_1	AA742643 AA808575 AW976668
55	437437	43709_1	AA226869 AA296516 AW959753 AA186390 AL359619 AA356195 AA148427 R22748 A1033624 BE548853 H95327 AW579751 BE561649 AA397533
			BE617136 AA236444 T89946 AA247450 N55777 W38725 A1743846 A1808406 AA922229 A1051464 W04713 R11251 W19656 A1042319 AA489276
			A1224533 H
	437945	44580_1	T78519 H59898 U72516
	438458	457837_1	AW975186 AA807807 D29548
	439518	47334_1	W76326 AF086341 W72300
60	439533	47349_1	W76021 AF088052 W72465
	439566	47387_1	AF086387 W77884 W72711
	439710	47550_1	AF086543 W96291 W96225
	441128	51021_2	AA570256 AW014761 AA573721 A1473237 A1022165 AA554071 AA127551 N90525 AW973623 AA447991 AA243852 BE328850 A148171 A1359627
			A1005068 A1356567 AA232991 AW016855 AA906902 AA233101 AA127550 BE512923
65			AF069475 AF069477 AF069476
	442476	543547_1	AA448154 AV647571
	444016	58699_1	AW379879 A1126285 H12014
	444168	593829_1	W03766 A1357775 AV660500 AV660731
	445821	69435_1	AW138582 A1638298 A1631640 A1963868 A1611082
70	448970	791254_1	NM_014253 AF100772 BE088769 AL022718 BE161779 AW863569 BE161640 AL039060 BE168542 AW296554 AA323193 AA235370 AW779760
	449625	8113_1	N48674 A1376997 RA5432 D59344 A1203107 F07491 R35360 R25094 A1913631 A1498402 T61382 A1016320 N45526 T61415 AA331486
			AA429504 R41904 AA279467 H09648 AA007236
	450166	82677_1	AA009647 AA131254 AA374293 AW954405 H04410 AW606284 AA151166 BE157467 BE157601 H04384 W46291 AW663674 H04021 H01532
	450375	83327_1	AA190993 H03231 H59605 H01642 AA852876 AA113758 AA626915 AA746952 A1161014 AA099554 R69067
75			NM_004460 U09278 U76833 AW630055 AW471133 C02434 W45237 AW7793518 BE070112 A1587479 A1624429 AW190535 A1446661 A1478772
			AW022667 AA528235 AA599775 AW613820 A1435783 AW594230 A1051768 A1200109 A1680296 AA436611 AW609728 W42634 A1682584 AA405569
			A1685653 AW0
	450825	84032_1	AW970107 AA513951 AA010406
80	451129	859870_1	BE072881 BE072946 A1762181
	451350	866945_1	A1791447 A1791327 AW886809
	452113	899664_1	A1859393 BE177742
	452203	903_2	X57522 AW295947 A1346197 A1304693 L21205 L21206 L21207 L21208 L21204 NM_000593 F06770 F12630 X57521 R18264 T74462 AA346259
			AW502508 AA904076 F08426 H23432 AA313737 AA393782 M78052 AA847441 AA487637 AA135770 AA353161 A1819778 AA054458 A1346733
			AW381447 A14

453331	96214_1	AJ240665 T53681 N77468 H51833 AA147247 R75732 C18450 R73999 AI095755 T49904 H03868 AA411580 R33395 AA410586 T48869 D63292 R31981 H12498 H02668 AA035018 R75957 AI803329 R27528 R36203 AI809932 AI808765 R78948 AA411449 AA976929 AI378760 AI378620 T48870 R7390
5	453682 977454_1	T79703 T96307 AL079725
	454177 1049351_1	AW807321 AW807262 AW177104 AW807319 AW807115 AW807344 AW807324 AW178116 BE141575 AW845849 AW807105 AW845868 BE140942 AW807178 AW807167 AW807398 AW807320 AW807306 AW845866
	454354 1129859_1	AW389896 AW389898 AW389906 AW609203 AW389873
	454457 1207274_1	AW753456 AW753036 AW854868 AW854862
10	454581 1225710_1	AW809189 AW809219 AW813574
	454765 1233905_1	AW819629 AW854320
	454860 1237732_1	AW835767 AW835537 BE160187
	454968 1247029_1	AW849046 AW847956 AW849039 AW847957 AW848279 AW848658 AW849034 AW849033
	455104 1253737_1	BE064863 BE153698 AW858751 BE153820 BE064737 BE153674 BE064730 BE065062 BE153536 AW856622 BE155079 BE064651 BE153665 BE064650 BE064691
15	455409 1288355_1	AW936832 AW936609 AW936657 AW936611 AW936739 AW936734 AW936779 AW936688 AW936659 AW936738 AW936827 AW936737 AW936736 AW936740 AW936833 AW936777 AW936830 AW936834 AW936829 AW936772 AW936638 AW936658 AW936638 AW936774 AW936778 AW936766 AW936776 AW936831 AW9
	455481 1293182_1	AW948317 AW948322 AW948329 AW948316 AW948298 AW948330 AW948325 AW948324
20	455646 1348557_1	BE064420 BE064435 BE064429 BE064414 BE064400 BE064517
	455778 1364506_1	BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952
	455899 1381547_1	BE155112 BE155154 BE155087 BE155247 BE155499 BE155367 BE155452
	456304 176820_1	AI820973 AI734077 AI820984 AA225796 AA225060 AA225101
	457364 328154_1	AW971037 AA508019 AA492345
25	457876 42814_2	AI821940 N67106 AI744264 AA808846 AA643417 AA643416 Z70715
	458199 504866_1	AW136417 AI141026 AI340960 AI091670 AI523802 AW572908 AI458860 AI924374 AI830572 AI400702 AI337539 AI968111 AI521308 AI492335 AI540779 AI672594 AW665077 AA971810 AA909139 AW082128 AI335251 AI807192 AW511744 AI023232 AI536899 AW207791 AI670910 AI002047 AW4

30	TABLE 14C:	Unique number corresponding to an Eos probeset
	Key:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA
	Ref:	sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
	Strand:	Indicates DNA strand from which exons were predicted.
35	Nt_position:	Indicates nucleotide positions of predicted exons.

Key	Ref	Strand	Nt_position
400492	9213749	Minus	123881-124090
400533	6981826	Minus	277132-277595
400645	8117693	Minus	58471-58718
400658	8118459	Minus	73525-73644
400780	8131663	Minus	118372-118619
400850	1927150	Minus	4506-4691
400924	7107613	Minus	30309-30498
401272	9797373	Minus	98374-98509
45	401454 9186923	Minus	114659-114832
	401696 3417290	Minus	46209-46401
	401702 1871197	Minus	68182-68325
	401841 7684597	Plus	89868-90006,91920-92085
	402032 7656761	Plus	62293-62475
50	402082 8117478	Minus	190046-190183
	402229 9965022	Minus	15739-15951,16166-16779
	402239 7690131	Plus	38175-38304,42133-42266
	402260 3399665	Minus	113765-113910,115653-115765,116808-116940
55	402274 2935596	Plus	5604-6527
	402604 9909420	Plus	20393-20767
	402615 9926801	Plus	131390-132157
	402799 3355547	Plus	35718-35899
	402855 9662953	Minus	59763-59909
60	402936 8894303	Plus	51655-51771
	403011 6693597	Minus	3468-3623
	403104 7331404	Minus	41800-41973
	403108 8980965	Plus	93253-93667
	403212 7630897	Minus	156037-156210
65	403267 7887182	Plus	116078-121885
	403288 8081479	Plus	133763-133899,135813-135958
	403290 8083178	Plus	19288-20076
	403291 7230870	Plus	95177-95435
	403349 8569773	Minus	167815-168374
70	403361 8570313	Minus	112496-112687
	403431 7139839	Plus	56509-56860
	403481 9965004	Plus	93496-93633
	403696 3135242	Minus	143487-143634
	403790 8084957	Minus	87828-87947,89835-90002
75	403849 7708855	Plus	95043-96519
	403942 7711825	Minus	99606-99757
	403961 7596976	Minus	110393-110603
	403969 8569909	Plus	31237-31375,32405-32506
	404053 3548785	Plus	61797-64205
80	404120 7342152	Plus	135775-136000
	404150 7534008	Plus	165811-165943
	404170 9930793	Plus	168836-169248
	404209 5006246	Minus	11247-11514
	404272 9885189	Plus	83207-83355,84358-84496,90519-90720,91371-91447

5	404407	7329316	Minus	48154-48499
	404571	7249169	Minus	112450-112648
	404584	9857511	Plus	138551-139153
	404592	9943965	Minus	39067-39225
	404632	9796668	Plus	45096-45229
	404748	7263437	Plus	11446-11591
	404891	7329392	Plus	84974-85125
	405046	7596829	Minus	4373-4528
10	405141	8980911	Plus	99861-100054
	405183	7209940	Plus	12335-12653
	405238	7249119	Minus	51728-51836
	405348	2914717	Minus	43310-43462
	405516	9454624	Plus	112707-112876,113676-113854
	405558	1621110	Plus	4502-4644,5983-6083
15	405605	5836195	Minus	117070-117270
	405717	9588573	Plus	11275-11973
	405760	6066938	Minus	37424-38045
	405863	7657810	Plus	49410-49620
20	405941	6758796	Plus	2798-3444
	406060	6899623	Minus	20339-20746
	406290	5686274	Plus	8711-9358
	406395	9256242	Minus	20805-20960
	406478	9857502	Plus	68314-68523,68853-68950
25	406481	9864741	Minus	91439-91579

TABLE 15A: ABOUT 1033 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 15A lists about 1033 genes up-regulated in glioblastoma compared to normal normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal tissues was greater than or equal to 3.0. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various brain tumors. The "average" normal tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant adult tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

PKay: Unique Eos probeset identifier number  
 ExAccn: Exon/Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of GLIOBLASTOMA to NORMAL ADULT TISSUES

40	PKay	ExAccn	UnigenelD	Unigene Title	R1
	427343	AI880044	Hs.176977	protein kinase C binding protein 2	60.5
	431917	D16181	Hs.2968	peripheral myelin protein 2	54.9
	418375	NM_003081	Hs.84389	synaptosomal-associated protein, 25kD	53.1
	428321	AI699994	Hs.2868	peripheral myelin protein 2	49.6
45	409389	AB007979	Hs.301281	Homo sapiens mRNA, chromosome 1 specific	45.4
	435147	AL133731	Hs.4774	Homo sapiens mRNA; cDNA DKFZp761C1712 (f	43.9
	413472	BE242870	Hs.75379	solute carrier family 1 (glial high affi	42.7
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	42.3
	456759	BE259150	Hs.127792	delta (Drosophila)-like 3	39.1
50	430838	N46664	Hs.169395	hypothetical protein FLJ12015	37.9
	417183	R52089	Hs.172717	ESTs	37.6
	426325	D28114	Hs.169309	myelin-associated oligodendrocyte basic	36.5
	425088	AA663372	Hs.169395	hypothetical protein FLJ12015	34.3
	429007	D80642		gb:HUM092E098 Human fetal brain (TFujiwa	33.9
55	449494	AW237014	Hs.315369	Homo sapiens cDNA: FLJ23075 (ts, clone L	33.9
	423849	AL157425	Hs.133315	Homo sapiens mRNA; cDNA DKFZp761J1324 (f	32.7
	429276	AF058085	Hs.198612	G protein-coupled receptor 51	32.3
	413333	M74028	Hs.75297	fibroblast growth factor 1 (acidic)	29.0
	450133	AW969769	Hs.105201	ESTs	27.9
60	412733	AA984472	Hs.74554	KIAA0080 protein	27.6
	425842	AI587490	Hs.159623	NK-2 (Drosophila) homolog B	27.3
	415829	AB013805	Hs.80220	catenin (cadherin-associated protein), d	27.1
	424140	248051	Hs.141308	myelin oligodendrocyte glycoprotein	25.2
	402604			Target Exon	24.3
65	437204	AL110216	Hs.22826	ESTs, Weakly similar to I55214 salivary	24.3
	422656	AI870435	Hs.1569	LIM homeobox protein 2	23.6
	447359	NM_012093	Hs.18268	adenylate kinase 5	23.3
	436878	BE465204	Hs.47448	ESTs	22.9
	435708	AI362949	Hs.75169	ESTs	22.9
70	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su	22.7
	439239	AI031540	Hs.235331	ESTs	22.4
	409395	U46745	Hs.336678	dysrobrevin, alpha	22.2
	425799	T08133	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,	21.9
	425057	AA826434	Hs.1619	achaete-scute complex (Drosophila) homol	21.3
75	444378	R41339	Hs.47860	neurotrophic tyrosine kinase, receptor,	21.2
	444513	AL120214	Hs.71117	glutamate receptor, ionotropic, AMPA 1	21.0
	419078	M93119	Hs.89584	insulinoma-associated 1	21.0
	425048	H05468	Hs.164502	ESTs	20.9
	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	19.3
80	423853	AB011537	Hs.133466	slit (Drosophila) homolog 1	19.3
	418110	R43523	Hs.217754	hypothetical protein FLJ22202	19.2
	447004	AW296968	Hs.157539	ESTs	18.6
	439415	F05538	Hs.4273	ESTs	18.6
	441497	R51064	Hs.23172	ESTs	18.5

	425523	AB007948	Hs.158244	KIAA0479 protein	18.3
	413597	AW302885	Hs.117183	ESTs	18.2
	433551	AI985544	Hs.12450	protocadherin 9	17.7
5	428392	H10233	Hs.2265	secretory granule, neuroendocrine protei	17.3
	453642	AI370936	Hs.34074	dipeptidylpeptidase VI	17.3
	416338	NM_002522	Hs.84154	neuronal pentraxin I	17.1
	437268	AI754847	Hs.227571	regulator of G-protein signalling 4	16.8
	408604	D51408	Hs.21925	ESTs	16.6
10	424581	M52062	Hs.150917	catenin (cadherin-associated protein), a	16.6
	422980	N46569	Hs.76722	CCAAT/enhancer binding protein (C/EBP)	16.5
	448302	AI480208	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,	16.4
	429468	M85835	Hs.12827	ESTs	16.3
	441350	AB020690	Hs.7782	paraneoplastic antigen MA2	15.9
15	448672	AI955511	Hs.225106	ESTs	15.8
	448743	AB032962	Hs.21896	KIAA1136 protein	15.7
	415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	15.3
	412855	NM_002374	Hs.167	microtubule-associated protein 2	15.2
	431019	NM_005249	Hs.2714	forkhead box G1B	14.8
20	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fs, clone CO	14.3
	433800	AI034361	Hs.135150	lung type-I cell membrane-associated gly	14.3
	416370	N50470	Hs.203697	ESTs, Weakly similar to I38022 hypoteti	14.1
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	14.0
	444471	AB020684	Hs.11217	KIAA0877 protein	13.9
25	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	13.8
	448595	AB014544	Hs.21572	KIAA0644 gene product	13.6
	441440	AI807981	Hs.30495	ESTs	13.6
	428982	NM_005097	Hs.194704	leucine-rich, glioma inactivated 1	13.5
	424790	AL119344	Hs.13326	ESTs, Weakly similar to 2004399A chromos	13.3
30	459516	AI049662	Hs.246858	EST	13.2
	421264	AL039123	Hs.103042	microtubule-associated protein 1B	13.2
	428342	AI739168		Homo sapiens cDNA FLJ13458 fs, clone PL	13.1
	408562	AI436323	Hs.31141	Homo sapiens mRNA for KIAA1568 protein,	12.9
	412959	D87458	Hs.75090	KIAA0782 protein	12.9
35	439199	R40373	Hs.26299	ESTs	12.8
	423419	R55336	Hs.23539	ESTs	12.5
	445495	BE622641	Hs.38489	ESTs, Weakly similar to I38022 hypoteti	12.4
	415849	R20529	Hs.6806	ESTs	12.4
	452372	AI885742	Hs.228474	ESTs	12.4
40	452744	AI267652	Hs.246107	Homo sapiens mRNA; cDNA DKFZp434E082 (fr	12.3
	426344	H41821	Hs.322469	transcriptional activator of the c-fos p	12.2
	415734	NM_014747	Hs.78748	KIAA0237 gene product	12.1
	426269	H15302	Hs.168950	Homo sapiens mRNA; cDNA DKFZp566A1046 (f	12.1
	444119	R41231	Hs.184261	ESTs, Weakly similar to T26686 hypoteti	12.0
45	409049	AI423132	Hs.146343	ESTs	11.9
	434277	X77748	Hs.3786	glutamate receptor, metabotropic 3	11.9
	427897	NM_017413	Hs.303084	apelin; peptide ligand for APJ receptor	11.8
	453941	U39817	Hs.36820	Bloom syndrome	11.8
	424120	T80579	Hs.290270	ESTs	11.7
50	418738	AW388633	Hs.6682	solute carrier family 7, (cationic amino	11.7
	411305	BE241596	Hs.69547	myelin basic protein	11.7
	424945	AI221919		hypothetical protein FLJ10582	11.6
	449639	W80363	Hs.58446	ESTs	11.5
	409638	AW450420	Hs.21335	ESTs	11.5
55	441016	AW138653	Hs.25845	ESTs	11.4
	429037	X81895	Hs.194765	H.sapiens GENX-5624 mRNA, 3' UTR	11.3
	407034	U84540		gb:Human dystrobrevin isoform DTN-3 (DTN	11.2
	446372	AB020644	Hs.14945	long fatty acyl-CoA synthetase 2 gene	11.2
	425984	AW836277	Hs.165636	hypothetical protein DKFZp761C07121	11.2
60	424432	AB037821	Hs.146858	protocadherin 10	11.1
	424893	AW295112	Hs.153648	Homo sapiens cDNA FLJ13303 fs, clone OV	11.1
	425649	U30930	Hs.158540	UDP glycosyltransferase 8 (UDP-galactose	11.1
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	11.1
	423678	AW963357	Hs.7847	ESTs	10.7
65	446692	Z44514		Homo sapiens mRNA for KIAA1763 protein,	10.7
	430691	C14187	Hs.103538	ESTs	10.7
	428728	NM_016625	Hs.191381	hypothetical protein	10.6
	427701	AA411101	Hs.243886	nuclear autoantigenic sperm protein (his	10.6
	431988	AC002302	Hs.77202	protein kinase C, beta 1	10.5
70	433896	AW294729	Hs.274461	ESTs	10.5
	431467	N71831	Hs.256398	Homo sapiens mRNA; cDNA DKFZp434E0528 (f	10.4
	419249	X14767	Hs.89768	gamma-aminobutyric acid (GABA) A recepto	10.3
	445041	T64183	Hs.282982	solute carrier	10.3
	446782	AI653048	Hs.144006	ESTs	10.2
75	451952	AL120173	Hs.301663	ESTs	10.2
	446711	AF169692	Hs.12450	protocadherin 9	10.1
	438054	AA776626	Hs.169309	ESTs	10.1
	443785	AW449952	Hs.190125	basic-helix-loop-helix-PAS protein	10.1
	451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	10.0
80	419863	AW952691	Hs.93485	Homo sapiens mRNA; cDNA DKFZp761D191 (fr	10.0
	416857	AA168775	Hs.292453	ESTs	10.0
	435191	R15912	Hs.4817	Homo sapiens clone 24461 mRNA sequence	10.0
	419271	N34901	Hs.238532	ESTs	9.9
	429927	NM_001115	Hs.2522	adenylate cyclase 8 (brain)	9.9

5	415293	R49462	Hs.106541	ESTs	9.9
	440184	AB002297	Hs.7022	dedicator of cyto-kinesis 3	9.8
	452526	W38537	Hs.280740	hypothetical protein MGC3040	9.8
	427304	AA781526	Hs.163853	ESTs	9.7
	420547	AF155140	Hs.98738	gonadotropin-regulated testicular RNA he	9.6
	421659	NM_014459	Hs.106511	protocadherin 17	9.6
	426847	S78723	Hs.298623	5-hydroxytryptamine (serotonin) receptor	9.6
	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	9.5
	447101	N72185	Hs.44189	ESTs	9.5
10	442613	AID04002	Hs.130522	Kv channel-interacting protein 1	9.5
	454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	9.5
	445102	AW204610	Hs.22270	ESTs	9.5
	435793	AB037734	Hs.4993	KIAA1313 protein	9.5
	437948	AA772920	Hs.303527	ESTs	9.5
15	438209	AL120659	Hs.6111	aryl-hydrocarbon receptor nuclear transi	9.4
	415170	R44386	Hs.164578	ESTs	9.3
	415486	H12214	Hs.13284	ESTs, Weakly similar to 2109260A B cell	9.2
	435501	AW051819	Hs.129908	KIAA0591 protein	9.2
20	416072	AL110370	Hs.79000	growth associated protein 43	9.2
	442910	AI365130	Hs.11307	ESTs, Weakly similar to T19326 hypotheti	9.1
	438080	AA777381	Hs.291530	ESTs, Weakly similar to ALUC_HUMAN IIII	9.1
	425187	AW014486	Hs.22509	ESTs	9.1
	424028	AF055084	Hs.153692	Homo sapiens cDNA FLJ14354 fs, clone Y7	9.0
	430091	AB032958	Hs.233023	KIAA1132 protein	9.0
25	427540	R12014	Hs.20976	ESTs	9.0
	447198	D61523	Hs.283435	ESTs	9.0
	449611	AI970394	Hs.197075	ESTs	8.9
	444124	R43097	Hs.6818	ESTs	8.9
30	451998	AW514021	Hs.245510	ESTs	8.8
	454048	H05626	Hs.6921	ESTs	8.8
	412268	N59008	Hs.26133	ESTs	8.8
	433597	AA708205	Hs.100343	ESTs	8.7
	447342	AI199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	8.6
35	450154	R15891	Hs.281587	Human (clone CTG-A4) mRNA sequences	8.6
	410102	AW248508	Hs.279727	ESTs; homologue of PEM-3 (Ciona savignyi	8.5
	423135	N57655	Hs.26411	ESTs	8.5
	418097	R45137	Hs.21868	ESTs	8.4
	420602	AF060877	Hs.99236	regulator of G-protein signalling 20	8.4
40	419721	NM_001650	Hs.288650	aquaporin 4	8.4
	449300	AI656959	Hs.346514	ESTs	8.4
	436954	AA740151	Hs.130425	ESTs	8.3
	425354	U62027	Hs.155935	complement component 3a receptor 1	8.3
	424997	AL138167	Hs.96920	ESTs	8.3
45	442710	AID15631	Hs.23210	ESTs	8.2
	449625	NM_014253		odt (odd Ozten-m, Drosophila) homolog 1	8.2
	451625	R58793	Hs.106576	alanine-glyoxylate aminotransferase 2-l	8.2
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	8.0
	449605	AW138581	Hs.198416	ESTs	8.0
50	407886	AW969688	Hs.100826	ESTs	8.0
	414175	AI308876	Hs.103849	hypothetical protein DKFZp761D112	7.9
	429946	R49390	Hs.254129	KIAA1678	7.9
	400293	N51002	Hs.306480	Homo sapiens mRNA; cDNA DKFZp761E2112 (I	7.9
	455601	AI368680	Hs.816	SRY (sex determining region Y)-box 2	7.9
55	409799	O11928	Hs.76845	phosphoserine phosphatase-like	7.8
	415279	F04237	Hs.1447	glial fibrillary acidic protein	7.8
	429918	AW873986	Hs.119383	ESTs	7.8
	449433	AI672096	Hs.9012	ESTs, Weakly similar to S26650 DNA-bindi	7.8
	422411	AW749443	Hs.22511	ESTs	7.7
60	448902	Z45998	Hs.22543	Homo sapiens mRNA; cDNA DKFZp761I1912 (I	7.7
	452355	N54926	Hs.29202	G protein-coupled receptor 34	7.7
	447414	D82343	Hs.74376	neuroblastoma (nerve tissue) protein	7.7
	407168	R45175	Hs.117183	ESTs	7.6
	448555	AI536697	Hs.159863	ESTs	7.6
65	428536	AI143139	Hs.2288	visinin-like 1	7.6
	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKFZp564N1662 (I	7.6
	420362	U79734	Hs.97206	huntingtin interacting protein 1	7.6
	435624	AF218942	Hs.24889	formin 2	7.6
	440105	AA694010	Hs.6932	Homo sapiens clone 23809 mRNA sequence	7.6
70	412068	S72043	Hs.73133	metallothionein 3 (growth inhibitory fac	7.6
	445568	H00918	Hs.268744	KIAA1796 protein	7.5
	417160	N76497	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	7.5
	423361	AW170055	Hs.47628	ESTs	7.5
	456965	AW131888	Hs.172792	ESTs, Weakly similar to hypothetical pro	7.5
75	458332	AI000341	Hs.220491	ESTs	7.4
	409902	AI337658	Hs.156351	ESTs	7.3
	448321	NM_005883	Hs.20912	adenomatous polyposis coli like	7.3
	420345	AW295230	Hs.25231	ESTs	7.3
80	402855			NM_001839; Homo sapiens calponin 3, acid	7.2
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	7.2
	425741	AF052152	Hs.159412	Homo sapiens clone 24828 mRNA sequence	7.2
	448986	H42169	Hs.347310	hypothetical protein FLJ14627	7.2
	415651	AI207162	Hs.3815	stathmin-like protein RB3	7.2
	412709	AL022327	Hs.74518	KIAA0027 protein	7.1

	451621	AI879148	Hs.26770	fatty acid binding protein 7, brain	7.1
	445745	AB007924	Hs.13245	KIAA0455 gene product	7.1
	439451	AF086270	Hs.278554	heterochromatin-like protein 1	7.1
5	418030	BE207573	Hs.83321	neuromedin B	7.1
	400292	AA250737	Hs.72472	BMP-R1B	7.1
	407748	AL079409	Hs.38175	KIAA0606 protein; SCN Circadian Oscillat	7.0
	440435	AL042201	Hs.21273	transcription factor NYD-sp10	7.0
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	7.0
10	417417	F05745	Hs.89512	ATPase, Ca transporting, plasma membrane	7.0
	440152	AB002376	Hs.7008	KIAA0378 protein	7.0
	422960	AW890487	Hs.63984	cadherin 13, H-cadherin (heart)	7.0
	454293	H49739	Hs.134013	ESTs, Moderately similar to HK61_HUMAN H	7.0
	447197	R36075		gb:yh88b01.61 Soares placenta Nb2HP Homo	7.0
15	426814	AF036943	Hs.172619	myelin transcription factor 1-like	6.9
	416836	D54745	Hs.80247	cholecystokinin	6.9
	447350	AI375572	Hs.172634	ESTs	6.9
	440074	AA863045	Hs.10669	ESTs, Weakly similar to T00050 hypotheti	6.9
	436039	AW023323	Hs.121070	ESTs	6.9
20	444398	T65213	Hs.4257	ESTs	6.9
	425234	AW152225	Hs.165909	ESTs, Weakly similar to t38022 hypotheti	6.9
	438330	AW450572	Hs.257316	ESTs	6.8
	410305	AF030409	Hs.62185	solute carrier family 9 (sodium/hydrogen	6.8
	421141	AW117261	Hs.125914	ESTs	6.7
25	412788	AA120960	Hs.198416	ESTs	6.7
	411078	AI222020	Hs.182364	CocooCrisp	6.7
	443455	AB001025	Hs.9349	ryanodine receptor 3	6.7
	448769	N66037	Hs.38173	ESTs	6.7
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALUF_HUMAN !!!!	6.7
30	414214	D49958	Hs.75819	glycoprotein M6A	6.6
	439845	AL355743	Hs.56663	Homo sapiens EST from clone 41214, full	6.6
	437036	AI571514	Hs.133022	ESTs	6.6
	429239	AA448419	Hs.45209	ESTs	6.6
	434164	AW207019	Hs.148135	serine/threonine kinase 33	6.6
35	412155	R38167	Hs.12449	Homo sapiens transmembrane protein HTPM1	6.5
	452834	AI638627	Hs.105685	KIAA1688 protein	6.5
	441916	AA993571	Hs.129075	ESTs	6.5
	451516	AI800515	Hs.12024	ESTs	6.5
	434808	AF155108	Hs.256150	Homo sapiens, Similar to RIKEN cDNA 2810	6.5
40	452461	N78223	Hs.108106	transcription factor	6.5
	450375	AA009647		a disintegrin and metalloproteinase doma	6.4
	434811	AW971205	Hs.114280	ESTs	6.4
	424624	AB032947	Hs.151301	Ca2+-dependent activator protein for secr	6.4
	429250	H56585	Hs.198308	tryptophan rich basic protein	6.3
45	414245	BE148072	Hs.75850	WAS protein family, member 1	6.3
	433447	U29195	Hs.3281	neuronal pentraxin II	6.3
	424922	BE386547	Hs.217112	hypothetical protein MGC10825	6.3
	426919	ALD41228		ELAV (embryonic lethal, abnormal vision,	6.3
50	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	6.3
	415669	NM_005025	Hs.78589	serine (or cysteine) proteinase inhibito	6.2
	449048	Z45051	Hs.27920	similar to S68401 (cattle) glucose induc	6.2
	433929	AI375499	Hs.27379	ESTs	6.2
	423346	AI267677	Hs.127416	synaptotagmin 1	6.2
	448148	NM_016578	Hs.20509	HBV pX associated protein-8	6.2
55	412140	AA219691	Hs.73825	RAB6 interacting, kinesin-like (rabkines	6.2
	409731	AA125985	Hs.56145	thymosin, beta, identified in neuroblast	6.2
	420608	BE548277	Hs.103104	ESTs	6.2
	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	6.2
	422175	N79885	Hs.6382	ESTs, Highly similar to T00391 hypotheti	6.1
60	428845	AL157579	Hs.153610	KIAA0751 gene product	6.1
	439274	AF086092	Hs.48372	ESTs	6.1
	447499	AW262580	Hs.147674	protocadherin beta 16	6.1
	425977	R15138	Hs.165570	Homo sapiens clone 25052 mRNA sequence	6.1
	453924	R49295	Hs.24886	ESTs	6.1
65	449340	AW235786	Hs.195359	hypothetical protein MGC10954	6.1
	420077	AW512260	Hs.87767	ESTs	6.1
	431721	AB032996	Hs.268044	KIAA1170 protein	6.1
	433701	AW445023	Hs.15155	ESTs	6.1
	430968	AW972830		gb:EST384925 MAGE resequences, MAGL Homo	6.1
70	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	6.1
	456723	Z43902	Hs.4748	adenylate cyclase activating polypeptide	6.0
	448681	AL109781	Hs.21754	Homo sapiens mRNA full length insert cDN	6.0
	429900	AA460421	Hs.30875	ESTs	6.0
	410909	AW898161	Hs.53112	ESTs, Moderately similar to ALU8_HUMAN A	6.0
75	432281	AK001239	Hs.274263	hypothetical protein FLJ10377	6.0
	448243	AW369771	Hs.52620	integrin, beta 8	6.0
	416427	BE244050	Hs.79307	Rac/Cdc42 guanine exchange factor (GEF)	6.0
	419704	AA429104	Hs.45057	ESTs	6.0
	436938	AL134451	Hs.197478	ESTs	6.0
80	428409	AW117207	Hs.98523	ESTs	6.0
	433244	AB040943	Hs.271285	KIAA1510 protein	6.0
	439772	AL365406	Hs.10268	Homo sapiens mRNA full length insert cDN	6.0
	408096	BE250162	Hs.83765	dihydrofolate reductase	6.0
	419929	U90268	Hs.93810	cerebral cavernous malformations 1	6.0

5	422544	AB018259	Hs.118140	KIAA0716 gene product	6.0
	413627	BE182082	Hs.246973	ESTs	6.0
	419985	H66373	Hs.5856	ESTs, Highly similar to BA393J16.3 [H.sa	6.0
	410366	AI267569	Hs.302669	hypothetical protein	6.0
	429183	AB014604	Hs.197955	KIAA0704 protein	5.9
	430188	AL049242	Hs.234794	Homo sapiens mRNA; cDNA DKFZp5648083 (tr	5.9
	441102	AA973905		intermediate filament protein syncoilin	5.9
	448533	AL119710	Hs.21365	nucleosome assembly protein 1-like 3	5.9
10	407182	AA312551	Hs.230157	ESTs	5.9
	437372	AA323968	Hs.283631	hypothetical protein DKFZp547G183	5.9
	433523	H29882		ESTs	5.9
	444165	AL137443	Hs.10441	hypothetical protein FLJ11236	5.9
	424343	AW956360	Hs.4748	adenylate cyclase activating polypeptide	5.9
15	420156	AW449258	Hs.6187	ESTs	5.9
	422864	AA318323	Hs.12827	gb:EST20390 Retina II Homo sapiens cDNA	5.8
	446727	AB011095	Hs.16032	KIAA0523 protein	5.8
	448543	AW897741	Hs.21380	Homo sapiens mRNA; cDNA DKFZp586P1124 (I	5.8
	430132	AA204686	Hs.234149	hypothetical protein FLJ20647	5.8
20	425782	U66468	Hs.159525	cell growth regulatory with EF-hand doma	5.8
	419629	AB020695	Hs.91662	KIAA0888 protein	5.8
	452279	AA286844	Hs.61260	hypothetical protein FLJ13164	5.8
	407608	AA663559	Hs.279789	histone deacetylase 3	5.8
	414737	AI160386	Hs.125087	ESTs	5.8
25	432154	AI701523	Hs.112577	ESTs	5.8
	410099	AA081630		KIAA0036 gene product	5.8
	411379	AI816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	5.8
	440492	R39127	Hs.21433	hypothetical protein DKFZp547J036	5.7
	424560	AA158727	Hs.150555	protein predicted by clone 23733	5.7
30	419498	AL036591	Hs.20887	hypothetical protein FLJ10392	5.7
	436643	AA757626	Hs.10941	ESTs, Weakly similar to IPP1_HUMAN PROTE	5.7
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	5.7
	419088	AI538323	Hs.52620	integrin, beta 8	5.7
	436109	AA922153	Hs.132760	hypothetical protein MGC15729	5.7
35	428588	F12101	Hs.185701	Homo sapiens mRNA full length insert cDN	5.7
	451752	AB032997	Hs.26966	KIAA1171 protein	5.7
	413492	CB7470	Hs.75400	KIAA0280 protein	5.7
	414683	S78296	Hs.76888	hypothetical protein MGC12702	5.6
	418079	RA0058	Hs.6911	ESTs	5.6
40	445873	AA250970	Hs.251946	poly(A)-binding protein, cytoplasmic 1-4	5.6
	437034	AA742643		gb:ny91c01.s1 NCL_CGAP_GCB1 Homo sapiens	5.6
	419544	AI909154		gb:QV-BT200-010499-007 BT200 Homo sapien	5.6
	452785	AL359942	Hs.296434	erythroid differentiation and denucleati	5.6
45	408081	AW451697	Hs.167409	ESTs	5.6
	436887	AW953157	Hs.193235	hypothetical protein DKFZp547D155	5.6
	413589	AW452631	Hs.313803	ESTs, Highly similar to AF157833.1 noncl	5.6
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	5.6
	433556	W56321	Hs.111460	calcium/calmodulin-dependent protein kin	5.5
	448299	AA497044	Hs.20887	hypothetical protein FLJ10392	5.5
50	426154	NM_001851	Hs.154850	collagen, type IX, alpha 1	5.5
	447773	AI423930	Hs.36790	ESTs, Weakly similar to putative p150 [H	5.5
	422421	AA325138	Hs.235873	hypothetical protein FLJ22672	5.5
	453128	AW026516	Hs.31791	acylphosphatase 2, muscle type	5.5
	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	5.5
55	440866	AI703103	Hs.271360	hypothetical protein MGC16275	5.4
	428976	AL037824	Hs.194695	ras homolog gene family, member I	5.4
	419723	AL120193	Hs.339810	longevity assurance (LAG1, S. cerevisiae	5.4
	452799	AI948829	Hs.213786	ESTs	5.4
	429038	AL023513	Hs.194766	seizure related gene 5 (mouse)-like	5.4
60	445255	NM_014841	Hs.12477	synaptosomal-associated protein, 91 kDa	5.4
	424332	AA338919	Hs.101615	ESTs	5.4
	440210	AW674562	Hs.125296	ESTs	5.4
	414825	X06370	Hs.77432	epidermal growth factor receptor (avian	5.4
	448935	AL078596	Hs.22591	nuclear receptor subfamily 2, group E, m	5.4
65	452786	R61362	Hs.106642	ESTs, Weakly similar to T09052 hypotheti	5.4
	408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	5.4
	423476	AL035633		Human DNA sequence from clone RPS-1046G1	5.4
	448507	AL133109	Hs.21333	Homo sapiens mRNA; cDNA DKFZp566N1047 (I	5.4
	419683	AA248897	Hs.48784	ESTs	5.4
70	407728	AW071502	Hs.175931	ESTs	5.4
	453313	BE005771	Hs.153746	hypothetical protein FLJ22490	5.4
	422094	AF129535	Hs.272027	F-box only protein 5	5.4
	452856	AF034799	Hs.30881	protein tyrosine phosphatase, receptor t	5.4
	434792	AA649253	Hs.132458	ESTs	5.4
75	412190	R16180	Hs.274461	ESTs	5.3
	425588	F07396	Hs.46627	ESTs	5.3
	444190	AI878918	Hs.10526	cysteine and glycine-rich protein 2	5.3
	429658	AI685086	Hs.26339	ESTs, Weakly similar to S21348 probable	5.3
	424458	M29273	Hs.1780	myelin associated glycoprotein	5.3
80	446997	AA383439	Hs.16758	Spir-1 protein	5.3
	427302	AA400540	Hs.135282	Homo sapiens cDNA FLJ11554 fts, clone HE	5.3
	439607	BE540565	Hs.159460	ESTs	5.3
	448499	BE613280	Hs.77550	hypothetical protein MGC1780	5.3
	410037	AB020725	Hs.58009	KIAA0918 protein	5.3



	451407	AA131376	Hs.343809	fibroblast growth factor 12B	5.3
	430287	AW182459	Hs.125759	ESTs, Weakly similar to LEU5_HUMAN LEUKE	5.3
	428784	Y12851	Hs.193470	purinergic receptor P2X, ligand-gated io	5.3
5	418512	AW498974		diacylglycerol kinase, zeta (104kD)	5.3
	435538	AB011540	Hs.4930	low density lipoprotein receptor-related	5.3
	420285	AA258124	Hs.293878	ESTs, Moderately similar to ZNF91_HUMAN Z	5.2
	407896	D76435	Hs.41154	Zic family member 1 (odd-paired Drosophi	5.2
	404819			NM_002688*:Homo sapiens peanut (Drosophi	5.2
10	426503	AA380153		gb:EST93093 Skin tumor I Homo sapiens cD	5.2
	405348			C7001664.gij12698061 chijBAB21849.1  (AB	5.2
	431552	AJ815863	Hs.259873	axonal transport of synaptic vesicles	5.2
	418677	S83308	Hs.87224	SRY (sex determining region Y)-box 5	5.2
	427250	R35941	Hs.25418	ESTs	5.2
15	428037	N47474	Hs.89230	potassium intermediate/small conductance	5.2
	445740	T78281	Hs.13226	Homo sapiens clone 25181 mRNA sequence	5.2
	430130	AL137311	Hs.234074	Homo sapiens mRNA; cDNA DKFZp781G02121 (	5.2
	423869	BE409301	Hs.134012	C1q-related factor	5.2
	416220	N49776	Hs.170994	hypothetical protein MGC10946	5.2
20	457005	AJ007421	Hs.172597	sal (Drosophila)-like 3	5.1
	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	5.1
	414372	AA143654		gb:z065e02.r1 Striatogene pancreas (93720	5.1
	410631	AA086469	Hs.47171	ESTs	5.1
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	5.1
25	420133	AA426117	Hs.155543	ESTs	5.1
	453884	AA355925	Hs.35232	KIAA0186 gene product	5.1
	414922	D00723	Hs.77631	glycine cleavage system protein H (amino	5.1
	414727	BE466904	Hs.190162	gb:h28103.x1 NC1_CGAP_GC6 Homo sapiens	5.1
	441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	5.1
30	437387	A198874	Hs.28847	AD026 protein	5.0
	400533			ENSP00000209376*:PREDE65 protein (Fragmen	5.0
	430979	A1479755	Hs.129010	ESTs	5.0
	448944	AB014605	Hs.22599	atrophin-1 interacting protein 1; activi	5.0
	444600	R41398	Hs.6996	ESTs	5.0
35	453785	AJ368236	Hs.283732	ESTs, Moderately similar to ALU1_HUMAN A	5.0
	428878	AA436884	Hs.48926	ESTs	5.0
	444670	H58373	Hs.332938	hypothetical protein MGC5370	5.0
	440471	AA866146	Hs.307944	ESTs	5.0
40	410434	AF051152	Hs.63668	toll-like receptor 2	5.0
	441390	AI692560	Hs.131175	ESTs	4.9
	448765	R15337	Hs.21958	Homo sapiens mRNA; cDNA DKFZp547D086 (tr	4.9
	422263	AA307639	Hs.129908	KIAA0591 protein	4.9
	431117	AF003522	Hs.250500	della (Drosophila)-like 1	4.9
	407235	D20569	Hs.169407	SAC2 (suppressor of actin mutations 2, y	4.9
45	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	4.9
	448548	R13209	Hs.21413	solute carrier family 12, (potassium-chl	4.9
	420092	AA814043	Hs.68045	ESTs	4.9
	449571	AW016812	Hs.200266	ESTs	4.9
	412811	H06382		ESTs	4.9
50	409100	H98216	Hs.42245	ESTs, Moderately similar to I38022 hypot	4.9
	403142			NM_002706*:Homo sapiens protein phosphat	4.9
	414300	AJ304870	Hs.188680	ESTs	4.9
	436607	AW661783	Hs.211061	ESTs	4.9
55	431553	X78075	Hs.2799	cartilage linking protein 1	4.9
	449328	AI962493	Hs.345303	ESTs	4.9
	420805	L10333	Hs.99947	reticulon 1	4.9
	421688	AK000307	Hs.106825	hypothetical protein FLJ20300	4.9
	452898	AA814497	Hs.78792	ESTs	4.9
60	427958	AA418000	Hs.98280	potassium intermediate/small conductance	4.9
	432328	AJ572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	4.9
	408453	AI369838	Hs.45127	chondroitin sulfate proteoglycan 5 (neur	4.8
	428841	AI418430	Hs.104935	ESTs	4.8
	416439	AA180363	Hs.118769	ESTs	4.8
	447458	AI741082	Hs.156961	ESTs	4.8
65	429433	AA452899	Hs.213586	ESTs, Weakly similar to KIAA1353 protein	4.8
	409746	NM_004794	Hs.56294	RAB33A, member RAS oncogene family	4.8
	436511	AA721252	Hs.291502	ESTs	4.8
	443392	AI055821	Hs.293420	ESTs	4.8
	423600	AI633559	Hs.310359	ESTs	4.8
70	425905	AB032859	Hs.318584	novel C3HC4 type Zinc finger (ring finger	4.8
	414706	AW340125	Hs.76989	KIAA0097 gene product	4.8
	407385	AA610150	Hs.272072	ESTs, Weakly similar to I38022 hypotheti	4.8
	439340	AB032436	Hs.6535	brain-specific Na-dependent inorganic ph	4.7
	427624	AA406245	Hs.24895	ESTs	4.7
75	413248	T64858	Hs.21433	hypothetical protein DKFZp547J036	4.7
	408670	AF160967	Hs.46784	potassium large conductance calcium-acti	4.7
	440491	R35252	Hs.130558	ESTs, Weakly similar to 2109260A B cell	4.7
	411555	AF113537	Hs.70669	HMP19 protein	4.7
	430471	AF064845	Hs.241523	hypothetical protein FLJ10142	4.7
80	413530	AA130158	Hs.19977	ESTs, Moderately similar to ALU8_HUMAN A	4.7
	445900	AF070526	Hs.125036	Homo sapiens clone 24787 mRNA sequence	4.7
	426457	AW894667	Hs.169965	chimerin (chimaerin) 1	4.7
	459527	AW977556	Hs.291735	ESTs, Weakly similar to I78885 serine/th	4.7
	453096	AW294631	Hs.11325	ESTs	4.7

	409125	R17268	Hs.343567	axonal transport of synaptic vesicles	4.7
	428001	H97428	Hs.219907	ESTs, Moderately similar to Transforming	4.7
	410276	A1554545	Hs.68301	angiopoietin-2	4.7
5	421637	AF035290	Hs.106300	Homo sapiens clone 23556 mRNA sequence	4.7
	421633	AF121860	Hs.106260	sorting nexin 10	4.7
	440052	A1633744	Hs.195648	ESTs, Weakly similar to I38022 hypothe	4.7
	439566	AF086387		gb:Homo sapiens full length insert cDNA	4.7
	432890	NM_014442	Hs.279751	sialic acid binding Ig-like lectin 8	4.6
	402145			Target Exon	4.6
10	409892	AW956113	Hs.7149	gb:EST368183 MAGE resequences, MAGO Homo	4.6
	458760	A498631	Hs.111334	ferritin, light polypeptide	4.6
	453362	H14988	Hs.107375	ESTs	4.6
	436734	A1937612	Hs.273758	hypothetical protein FLJ23112	4.6
15	426925	NM_001196	Hs.315689	Homo sapiens cDNA: FLJ22373 fs, clone H	4.6
	409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA119	4.6
	428832	AA578229	Hs.324239	ESTs, Moderately similar to ZN91_HUMAN Z	4.6
	423770	AW976768	Hs.132776	Homo sapiens cDNA FLJ10077 fs, clone HE	4.6
	410264	AK001853	Hs.61508	Homo sapiens cDNA FLJ10091 fs, clone PL	4.6
20	429149	AW193360	Hs.197962	ESTs, Weakly similar to I38022 hypothe	4.6
	437762	T78028	Hs.154679	synaptotagmin I	4.6
	439249	AF086060	Hs.170053	G-protein coupled receptor 88	4.6
	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fs, clone PL	4.6
	425256	BE297611	Hs.155392	collapsin response mediator protein I	4.6
25	415257	F03016	Hs.27513	ESTs	4.6
	428186	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	4.6
	458814	A1498957	Hs.170861	ESTs, Weakly similar to Z195_HUMAN ZINC	4.6
	451320	AW118072		diacylglycerol kinase, zeta (104kD)	4.5
	424998	U58515	Hs.154138	chitinase 3-like 2	4.5
30	422709	AA315331	Hs.153485	ESTs	4.5
	420578	AA813546	Hs.99034	GTP-binding protein Rho7	4.5
	421977	W94197	Hs.110165	ribosomal protein L26 homolog	4.5
	457465	AW301344	Hs.122908	DNA replication factor	4.5
	427712	A1368024	Hs.283696	ESTs	4.5
35	444656	A1277924	Hs.145199	ESTs	4.5
	413409	A1638418	Hs.1440	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	4.5
	429399	AA452244	Hs.16727	ESTs	4.5
	450639	A1703186	Hs.277174	ESTs	4.5
	452106	A1141031	Hs.21342	ESTs	4.5
40	424240	AB023185	Hs.143535	calcium/calmodulin-dependent protein kin	4.5
	433009	AA761668		gb:nz24c08.s1 NCI_CGAP_GC81 Homo sapiens	4.5
	446657	A1335191	Hs.260702	ESTs, Weakly similar to 2109260A B cell	4.5
	428189	AA424030	Hs.46627	ESTs	4.5
	423178	A1033140	Hs.124983	Homo sapiens mRNA: cDNA DKFZp564C142 (fr	4.5
45	445133	AW157646	Hs.198689	ESTs	4.5
	418771	AA807881	Hs.25329	ESTs	4.4
	438456	AA913381	Hs.20594	ESTs	4.4
	410386	W26187	Hs.3327	Homo sapiens cDNA: FLJ22219 fs, clone H	4.4
	413834	BE296896	Hs.224179	ESTs, Weakly similar to I38022 hypothe	4.4
50	419103	Z40229	Hs.96423	hypothetical protein FLJ23033	4.4
	420560	AW207748	Hs.59115	ESTs	4.4
	439662	H97552	Hs.269060	ESTs	4.4
	408577	H50572	Hs.19515	ESTs, Highly similar to NRG3_HUMAN PRO-N	4.4
	445034	AW293376	Hs.143659	ESTs	4.4
55	402605			Target Exon	4.4
	426271	AF026547	Hs.169047	chondroitin sulfate proteoglycan 3 (neur	4.4
	457561	AA331517	Hs.286055	chimerin (chimaerin) 2	4.4
	430676	AF084866		gb:Homo sapiens envelope protein RIC-3 (	4.4
	439570	T79925	Hs.269165	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.4
60	452752	AW044058	Hs.33578	KIAA0820 protein	4.4
	439108	AW163034	Hs.6467	synaptogyrin 3	4.4
	405819			NM_002578:Homo sapiens p21 (CDKN1A)-acti	4.4
	446544	A1831932	Hs.7047	ESTs, Weakly similar to Unknown (H.sapie	4.4
	412530	AA766268	Hs.266273	hypothetical protein FLJ13346	4.4
65	420871	AA702972	Hs.65300	ESTs	4.4
	408622	AA056050	Hs.202577	Homo sapiens cDNA FLJ12166 fs, clone MA	4.4
	429269	AA449013	Hs.99203	ESTs	4.3
	427463	AA442224	Hs.97900	ESTs	4.3
	425402	A1215881	Hs.24970	ESTs, Weakly similar to B34323 GTP-bindi	4.3
70	412046	Y07847	Hs.73088	RAS-related on chromosome 22	4.3
	427194	AA399018	Hs.250835	ESTs	4.3
	437834	AA769294	Hs.283854	gb:nz36g03.s1 NCI_CGAP_GC81 Homo sapiens	4.3
	409172	Z99399	Hs.122593	ESTs	4.3
	409953	AA332277	Hs.57691	cadherin 18, type 2	4.3
75	426968	U07616	Hs.173034	amphiphysin (Sülf-Mann syndrome with br	4.3
	452092	BE245374	Hs.27842	hypothetical protein FLJ11210	4.3
	438458	AW975186		gb:EST387284 MAGE resequences, MAGN Homo	4.3
	446936	H10207	Hs.47314	ESTs	4.3
	433932	AW954599	Hs.169330	neuronal protein	4.3
80	424800	AL035588	Hs.153203	MyoD family inhibitor	4.3
	421988	AW450481	Hs.161333	ESTs	4.3
	442832	AW206560	Hs.253569	ESTs	4.3
	416586	D44643	Hs.14144	secreted modular calcium-binding protein	4.2
	408369	R38438	Hs.182575	solute carrier family 15 (H777) transport	4.2

5	450530	NM_006668	Hs.25121	cytochrome P450, subfamily 46 (cholester	4.2
	449318	AW236021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	4.2
	438624	AA889055	Hs.123468	ESTs	4.2
	421027	AA761198	Hs.55254	ESTs	4.2
	417632	R20855	Hs.5422	glycoprotein M6B	4.2
	419412	AW161058	Hs.90297	synuclein, beta	4.2
	430228	AW950939	Hs.6382	ESTs, Highly similar to T00391 hypotheti	4.2
	450813	AJ739625	Hs.203376	ESTs	4.2
10	412505	AA974491	Hs.21734	ESTs	4.2
	440168	AA868507	Hs.126141	ESTs	4.2
	441707	R42637	Hs.21963	hypothetical protein DKFZp76180514	4.2
	438703	AJ803373	Hs.31599	ESTs	4.2
	444127	N63620	Hs.13281	ESTs	4.2
15	447397	BE247676	Hs.18442	E-1 enzyme	4.2
	445523	Z30118	Hs.293788	ESTs, Moderately similar to unnamed prot	4.2
	415079	R43179	Hs.22895	hypothetical protein FLJ23548	4.2
	416871	H98716		gb:yx13d08.s1 Soares melanocyte 2N5HM Ho	4.2
	408838	AJ669535	Hs.40369	ESTs	4.2
20	425287	R88249	Hs.155524	peanut (Drosophila)-like 2	4.2
	404584			Target Exon	4.2
	436035	AA703679	Hs.106999	ESTs, Weakly similar to SYT5_HUMAN SYNAP	4.2
	409091	AW970385	Hs.269423	ESTs	4.2
	437117	AL049256	Hs.122593	ESTs	4.2
25	429643	AA455889	Hs.167279	FYVE-finger-containing Rab5 effector pro	4.2
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	4.2
	408177	AJ241733	Hs.43871	ESTs	4.2
	438875	AA827840	Hs.189059	ESTs	4.2
	447877	AJ435184	Hs.164252	ESTs	4.2
30	415402	AA164687	Hs.177576	mannosyl (alpha-1,3)-glycoprotein beta-	4.2
	434859	BE255080	Hs.299315	collapsin response mediator protein-5, C	4.2
	449714	AB033015	Hs.23941	KIAA1189 protein	4.2
	427315	AA179949	Hs.175563	Homo sapiens mRNA; cDNA DKFZp564N0763 (f	4.2
	404541			NM_030795:Homo sapiens stathmin-like 4 (	4.1
35	449969	AW295142	Hs.180187	Homo sapiens cDNA FLJ14337 fs, clone PL	4.1
	422374	AW732869	Hs.1519	protein kinase, cAMP-dependent, regulato	4.1
	422253	W81526	Hs.118329	ESTs, Moderately similar to GAD_HUMAN GA	4.1
	440483	AJ200836	Hs.150386	ESTs	4.1
	429421	AL031658		Human DNA sequence from clone RP1-310013	4.1
40	432882	NM_013257	Hs.279696	serum/glucocorticoid regulated kinase-II	4.1
	424001	W87883	Hs.137476	paternally expressed 10	4.1
	422170	AJ791949	Hs.112432	anti-Mullerian hormone	4.1
	445292	AV653264	Hs.13982	Homo sapiens cDNA FLJ14666 fs, clone NT	4.1
	450407	NM_008810	Hs.24969	gamma-aminobutyric acid (GABA) A recepto	4.1
45	429401	AW296102	Hs.99272	ESTs, Weakly similar to S32567 A4 protei	4.1
	408950	AA707814	Hs.14945	long fatty acyl-CoA synthetase 2 gene	4.1
	415796	R87548	Hs.78854	ATPase, Na <sup>+</sup> transporting, beta 2 polypep	4.1
	446619	AJ076843	Hs.313	secreted phosphoprotein 1 (osteopontin,	4.1
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	4.1
50	416547	H62914	Hs.268946	ESTs, Weakly similar to PC4259 ferritin	4.1
	412777	AJ335773	Hs.270123	ESTs	4.1
	445225	AJ216555	Hs.202398	ESTs	4.1
	408926	AF217525	Hs.49002	Down syndrome cell adhesion molecule	4.1
	417873	BE266659	Hs.293659	Homo sapiens, Similar to RIKEN cDNA A430	4.1
55	443301	AJ733614	Hs.220587	ESTs, Moderately similar to ALU5_HUMAN A	4.1
	429281	AA830858	Hs.29808	Homo sapiens cDNA: FLJ21122 fs, clone C	4.1
	448966	AW372914	Hs.86149	phosphoinositid 3-phosphate-binding prot	4.1
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	4.1
	417355	D13168	Hs.82002	endothelin receptor type B	4.1
60	410359	R38824	Hs.106313	ESTs	4.1
	426529	AF090100	Hs.170241	Homo sapiens clone IMAGE 23915	4.1
	433323	AA805132	Hs.159142	ESTs	4.1
	434933	R91095	Hs.4276	KIAA1701 protein	4.1
	453331	AJ240665		ESTs	4.1
65	422661	NM_014700	Hs.119004	KIAA0665 gene product	4.1
	424726	AK001007	Hs.138760	Homo sapiens cDNA FLJ10145 fs, clone HE	4.0
	416805	F13271	Hs.79981	Human clone 23560 mRNA sequence	4.0
	441797	AJ836933	Hs.214635	ESTs	4.0
	424282	R76421	Hs.135694	ESTs	4.0
70	407792	AJ077715	Hs.39384	putative secreted ligand homologous to I	4.0
	425390	AJ092634	Hs.156114	protein tyrosine phosphatase, non-recept	4.0
	435312	AJ243396	Hs.4865	voltage-gated sodium channel beta-3 subu	4.0
	424635	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fs, clone PL	4.0
	423279	AW959881	Hs.290943	ESTs	4.0
	444001	AJ095087	Hs.152299	ESTs, Moderately similar to S65657 alpha	4.0
75	410768	AF038185	Hs.66187	Homo sapiens clone 23700 mRNA sequence	4.0
	428413	AA377823		gb:EST90805 Synovial sarcoma Homo sapien	4.0
	450581	AF081513	Hs.25195	TGF-beta 4	4.0
	435854	AJ278120	Hs.4996	putative ankyrin-repeat containing prota	4.0
80	433615	AA732982	Hs.269607	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.0
	432058	AW665996	Hs.130729	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.0
	439774	AL360257	Hs.213493	Homo sapiens mRNA full length insert cDN	4.0
	445666	R59960	Hs.282386	ESTs	4.0
	450582	AJ339732		G-rich RNA sequence binding factor 1	4.0

437814	AI088192	Hs.135474	ESTs, Weakly similar to DDX9_HUMAN ATP-D	4.0
451468	AW503338	Hs.293663	ESTs, Moderately similar to I38022 hypot	4.0
449277	AA001064	Hs.43670	ESTs	4.0
440553	AA889416	Hs.344043	Homo sapiens cDNA FLJ14459 fs, clone HE	4.0
445888	AF070564	Hs.13415	Homo sapiens clone 24571 mRNA sequence	4.0
420111	AA255652		gb:zs21h11.1.1 NCI_CGAP_GCB1 Homo sapiens	4.0
407198	H91679		gb:yy04a07.s1 Soares fetal liver spleen	4.0
422564	AI148006	Hs.222120	ESTs	4.0
443992	AW022228	Hs.322922	ESTs	4.0
435542	AA687376		ESTs	4.0
444153	AK001610	Hs.10414	hypothetical protein FLJ10748	4.0
437748	AF234882	Hs.5814	suppression of tumorigenicity 7	4.0
439285	AL133916		hypothetical protein FLJ20093	4.0
449655	AI021987	Hs.59970	ESTs	4.0
458435	AI418718	Hs.144121	ESTs, Weakly similar to T46916 hypotheti	4.0
412659	AW753865	Hs.74376	olfactomedin related ER localized protel	4.0
423905	AW579960	Hs.135150	lung type-I cell membrane-associated gly	4.0
432683	AW995441	Hs.10475	ESTs	4.0
410765	AI894972	Hs.66180	nucleosome assembly protein 1-like 2	4.0
420649	AI866964	Hs.124704	ESTs, Moderately similar to S65657 alpha	4.0
450927	AI807804	Hs.134342	TASP for testis-specific adriamycin sens	4.0
448985	AA324885	Hs.22777	carbonic anhydrase XI	4.0
416406	D86981	Hs.79299	lipoma HMGIC fusion partner-like 2	4.0
412754	AW160375	Hs.74565	amyloid beta (A4) precursor-like protein	3.9
416340	N31772	Hs.79226	fasciculation and elongation protein zet	3.9
428862	NM_000346	Hs.2316	SRY (sex determining region Y)-box 9 (ca	3.9
413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	3.9
419687	AI638859	Hs.227699	ESTs, Weakly similar to T203_HUMAN TRANS	3.9
453438	AI469935	Hs.22792	ESTs	3.9
410082	AA081594	Hs.158311	Musashi (Drosophila) homolog 1	3.9
424736	AF230877	Hs.152701	microtubule-interacting protein that ass	3.9
412328	R07586	Hs.73817	small inducible cytokine A3 (homologous	3.9
411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	3.9
439935	S75105	Hs.8358	glutamate receptor, ionotropic, kainate	3.9
459278	AW294659	Hs.34054	Homo sapiens cDNA: FLJ22488 fs, clone H	3.9
432809	AA565509	Hs.131703	ESTs	3.9
450568	AL050078	Hs.25159	Homo sapiens cDNA FLJ10784 fs, clone NT	3.9
413951	AW051200	Hs.75640	natriuretic peptide precursor A	3.9
435743	T66881	Hs.12962	ESTs	3.9
447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	3.9
417576	AA339449	Hs.82285	phosphoribosylglycinamide formyltransfer	3.9
448526	AB028946	Hs.21361	KIAA1023 protein	3.9
445890	AF055019	Hs.21906	Homo sapiens clone 24670 mRNA sequence	3.9
425241	AA324624	Hs.155247	aldolase C, fructose-bisphosphate	3.8
417333	AL157545	Hs.173179	bromodomain and PHD finger containing, 3	3.8
435832	AA425688	Hs.41641	Bruno (Drosophila) -like 4, RNA binding	3.8
410592	R94088	Hs.43569	ESTs	3.8
443361	AI792628	Hs.133273	ESTs	3.8
403696			C4001100"igil5852342[gb]AAD54015.1] (AF0	3.8
437756	AA767537	Hs.197096	ESTs	3.8
433675	AW977853	Hs.75319	ribonucleotide reductase M2 polypeptide	3.8
414998	NM_002543	Hs.77729	oxidised low density lipoprotein (lectin	3.8
425652	AB021742	Hs.322431	neurogenic differentiation 2	3.8
437449	AL390153	Hs.208339	Homo sapiens mRNA; cDNA DKFZp762G113 (fr	3.8
421040	AA715026	Hs.135280	ESTs	3.8
454171	AW854832		gb:OV2-CT0261-201099-011-405 CT0261 Homo	3.8
443740	R56434	Hs.21062	ESTs	3.8
441668	AI611973	Hs.136313	ESTs	3.8
423175	W27595	Hs.347310	hypothetical protein FLJ14627	3.8
457183	H91882	Hs.118569	Dvl-binding protein IDAX (inhibition of	3.8
438142	T90309	Hs.269651	ESTs	3.8
408875	NM_015434	Hs.48604	DKFZP434B168 protein	3.8
436899	AA764852	Hs.291567	ESTs	3.8
456497	AW967956	Hs.123848	ESTs, Weakly similar to AF108460 1 ubinu	3.8
416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	3.8
413199	M62843	Hs.75236	ELAV (embryonic lethal, abnormal vision,	3.8
410711	AB002316	Hs.65746	KIAA0318 protein	3.8
454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	3.8
438944	AA302517	Hs.92732	KIAA1444 protein	3.8
445078	AI869975	Hs.4775	junctional protein 3	3.8
424330	AW073953	Hs.333396	Homo sapiens cDNA FLJ13596 fs, clone PL	3.8
439099	AB037800	Hs.6462	protein kinase C and casein kinase subst	3.8
449444	AW818436	Hs.23590	solute carrier family 16 (monocarboxylic	3.8
411252	AB018549	Hs.69328	MD-2 protein	3.7
448275	BE514434	Hs.20830	kinesin-like 2	3.7
434269	AK001991	Hs.3781	similar to murine leucine-rich repeat pr	3.7
400777			NM_007325"-Homo sapiens glutamate recept	3.7
419586	AI088485	Hs.144759	ESTs, Weakly similar to I38022 hypotheti	3.7
458072	AI890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fs, clone K	3.7
445908	R13580	Hs.13436	Homo sapiens clone 24425 mRNA sequence	3.7
448451	AW015994	Hs.345433	gb:UH-B10p-abh-g-09-0-ULs1 NCI_CGAP_S	3.7
430183	BE010038		gb:PM3-BN0176-100400-001-g04 BN0176 Homo	3.7
430147	R60704	Hs.234434	hair/enhancer-of-split related with YRP	3.7

5	458912	AJ911066	Hs.138294	ESTs	3.7
	428110	AJ312485	Hs.170408	ESTs, Moderately similar to Z195_HUMAN Z	3.7
	448048	BE281291	Hs.124813	ESTs, Moderately similar to A47582 B-cell	3.7
	442326	H92962	Hs.34574	hypothetical protein MGC14817	3.7
	422798	R92347	Hs.98908	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.7
	428873	AJ701609	Hs.65379	ESTs	3.7
	438208	ALD41224	Hs.32171	ESTs	3.7
	414040	N58513	Hs.40403	Cbp/p300-interacting transactivator, wit	3.7
10	407846	AA426202	Hs.48384	heparan sulfate (glucosamine) 3-O-sulfot	3.7
	408829	NM_006042	Hs.4241	ESTs	3.7
	425010	T16837	Hs.92423	ESTs	3.7
	427209	H06509	Hs.62604	KIAA1568 protein	3.7
	407603	AW955705	Hs.122713	Homo sapiens, clone IMAGE:4299322, mRNA,	3.6
	410126	BE169274	Hs.84152	KIAA0036 gene product	3.6
15	426646	AA382787	Hs.90207	ESTs	3.6
	418329	AW247430	Hs.192843	cystathionine-beta-synthase	3.6
	419390	AJ701162	Hs.2839	hypothetical protein MGC11138	3.6
	441703	AW390054	Hs.346112	leucine zipper protein FKSG14	3.6
20	431725	X65724	Hs.129908	Norrie disease (pseudoglioma)	3.6
	448425	AI500359	Hs.6439	ESTs	3.6
	423611	AB011163	Hs.268433	KIAA0591 protein	3.6
	438831	BE263273	Hs.40808	synapsin II	3.6
	419235	AW470411	Hs.184592	neurotrophin	3.6
25	451027	AW519204	Hs.38592	ESTs	3.6
	428483	AJ908539	Hs.9700	KIAA0344 gene product	3.6
	424947	R77952	Hs.21782	ESTs, Weakly similar to alternatively sp	3.6
	404150		Hs.83384	Target Exon	3.6
	450297	AW901347	Hs.21659	hypothetical protein FLJ23342	3.6
30	443715	AI583187	Hs.20999	cyclin E1	3.6
	435910	AJ084152	Hs.333371	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.6
	418064	BE387287	Hs.21239	S100 calcium-binding protein, beta (neur	3.6
	432488	AA551010	Hs.21906	ESTs	3.6
	431342	AW971018	Hs.283955	ESTs	3.6
35	437916	BE566249	Hs.211193	hypothetical protein FLJ23142	3.6
	412043	BE156622	Hs.152049	Homo sapiens clone TA40 untranslated mRN	3.6
	448448	NM_014954	Hs.26944	KIAA0985 protein	3.6
	447818	W79940	Hs.152825	Homo sapiens clone 24670 mRNA sequence	3.6
	445105	AF238869	Hs.244624	Homo sapiens clone GLSH-2 similar to gl	3.6
40	409557	BE182896	Hs.278558	ESTs	3.6
	425202	AW962282	Hs.138411	ESTs, Weakly similar to I38022 hypotheti	3.6
	451734	NM_006176	Hs.272155	neurogranin (protein kinase C substrate,	3.6
	425331	AW962128	Hs.145710	gb:EST374201 IMAGE resequences, MAGG Homo	3.6
	412799	AJ267606	Hs.59847	gb:aq91h03.x1 Stanley Frontal S8 pool 1	3.6
45	435040	AI932350	Hs.151738	ESTs	3.6
	434149	Z43829	Hs.53563	hypothetical protein MGCS469	3.6
	415709	AA649850	Hs.3781	ESTs	3.6
	424051	AL110203	Hs.130489	Homo sapiens mRNA; cDNA DKFZp586J1922 (f	3.6
	437640	AA764893	Hs.184780	ESTs, Weakly similar to I38022 hypotheti	3.6
50	445953	AI612775	Hs.119062	ESTs	3.6
	449256	AA059050	Hs.293707	ESTs	3.6
	424687	J05070	Hs.79348	matrix metalloproteinase 9 (gelatinase B	3.6
	409327	L41162	Hs.20985	collagen, type IX, alpha 3	3.6
	417675	AJ080607	Hs.195614	similar to murine leucine-rich repeat pr	3.6
55	423641	AL137256	Hs.248941	ATPase, aminophospholipid transporter-li	3.6
	443912	R37257	Hs.190325	ESTs	3.6
	424572	M19650	Hs.26468	Z, 3'-cyclic nucleotide 3' phosphodiester	3.5
	424899	AL119387	Hs.2250	ESTs	3.5
	439726	AW449893	Hs.67991	ESTs, Weakly similar to I38598 zinc fing	3.5
60	416490	AF090116	Hs.44234	regulator of G-protein signalling 7	3.5
	458809	AW972512	Hs.7033	sin3-associated polypeptide, 30kD	3.5
	429084	AJ001443	Hs.288446	splicing factor 3b, subunit 3, 130kD	3.5
	407624	AW157431	Hs.2928	ESTs	3.5
	419038	AW134924	Hs.255205	ESTs	3.5
65	451489	NM_005503	Hs.164007	amyloid beta (A4) precursor protein-bind	3.5
	428242	H55709	Hs.20943	leukemia inhibitory factor (cholestergic	3.5
	411048	AK001742	Hs.171618	hypothetical protein DKFZp434G0522	3.5
	435575	AF213457	Hs.141939	triggering receptor expressed on myeloid	3.5
	424340	AA339036	Hs.190488	ESTs	3.5
70	425790	AW136286	Hs.102910	ESTs	3.5
	432188	AI362952	Hs.21527	solute carrier family 7 (cationic amino	3.5
	453898	AW293483	Hs.125304	KIAA1853 protein	3.5
	434784	AA649051	Hs.28107	ESTs	3.5
	452449	AW068658	Hs.13223	ESTs	3.5
75	425212	AW962253	Hs.22791	ESTs	3.5
	407253	AA411175	Hs.135033	ESTs, Moderately similar to S65857 alpha	3.5
	418049	AA211467		Homo sapiens, Similar to nuclear localiz	3.5
	421247	BE391727		general transcription factor IIF, polype	3.5
	459311	R40192		Human DNA sequence from clone GS1-115M3	3.5
80	439450	R51613		ESTs	3.5
	435545	AA687415		ESTs	3.5
	445729	H21066		Homo sapiens mRNA full length insert cDN	3.5
	448999	AF179274		transmembrane protein with EGF-like and	3.5
	412590	AL134388		ESTs, Weakly similar to I38022 hypotheti	3.5

	438527	A1969251	Hs.115325	RAB7, member RAS oncogene family-like 1	3.5
	441111	A1806867	Hs.126594	ESTs	3.5
	418630	A1351311	Hs.251946	poly(A)-binding protein, cytoplasmic 1-4	3.5
5	439920	H05430	Hs.288433	neurotrimin	3.5
	421268	A1126821	Hs.30514	ESTs	3.5
	432022	AL162042	Hs.272348	Homo sapiens mRNA; cDNA DKFZp761L1212 (f	3.5
	412719	AW016610	Hs.816	ESTs	3.5
	435092	AL137310	Hs.4749	Homo sapiens mRNA; cDNA DKFZp761E13121 (	3.5
10	414178	AW957372	Hs.46791	ESTs, Weakly similar to I38022 hypothetical	3.5
	437252	A1433833	Hs.164159	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.5
	452108	AW135982	Hs.203013	hypothetical protein FLJ12748	3.4
	421183	AL135740	Hs.102447	TSC-22-like	3.4
	441834	AL138034	Hs.7979	KIAA0736 gene product	3.4
	413812	AW188687	Hs.44748	ESTs	3.4
15	449932	A1675444	Hs.263024	ESTs	3.4
	447067	R42098	Hs.21964	ESTs	3.4
	408296	AL117452	Hs.44155	DKFZP586G1517 protein	3.4
	447028	A1973128	Hs.167257	brain link protein-1	3.4
20	432715	AA247152	Hs.200483	ESTs, Weakly similar to KIAA1074 protein	3.4
	418358	L02840	Hs.84244	potassium voltage-gated channel, Shab-re	3.4
	417084	H08370	Hs.33067	ESTs	3.4
	444534	AW271626	Hs.42294	ESTs	3.4
	440700	AW952281	Hs.296184	guanine nucleotide binding protein (G pr	3.4
25	436637	A1783629	Hs.26766	ESTs	3.4
	412820	BE001238		gb:CM3-BN0075-240200-101-d11 BN0075 Homo	3.4
	428138	AA773842	Hs.293799	ESTs	3.4
	453033	AA325869	Hs.31463	KIAA0281 gene product	3.4
	453305	R39224	Hs.267997	EHM2 gene	3.4
30	459660	M79082		ESTs	3.4
	418821	AA436002	Hs.183161	ESTs	3.4
	439518	W76326		gb:zd60d04.r1 Soares_fetal_heart_NbHH19W	3.4
	400379	NM_018432		Homo sapiens ovarian cancer related prot	3.4
	437085	AA743935	Hs.202329	ESTs	3.4
35	419852	AW503756	Hs.286184	hypothetical protein dJ551D2.5	3.4
	430694	AA810624	Hs.30936	ESTs, Weakly similar to H2BH_HUMAN HISTO	3.4
	441287	AW293132	Hs.131373	ESTs	3.4
	425870	R13406	Hs.56782	ESTs	3.4
	443672	AA323362	Hs.9667	butyrobetaine (gamma), 2-oxoglutarate di	3.4
40	448044	A1458682		gb:tk13e01.x1 NCI_CGAP_Lu24 Homo sapiens	3.4
	405238			Target Exon	3.4
	440404	A1015881	Hs.324527	mitochondrial ribosomal protein S5	3.4
	453590	AF150278	Hs.33578	KIAA0820 protein	3.4
	450756	A1733488	Hs.144062	ESTs	3.4
45	404283			ENSP00000244751::Copine-like protein KIA	3.4
	423257	AW161039	Hs.125878	synapsin III	3.4
	432149	AW614326	Hs.133483	ESTs, Weakly similar to T34549 probable	3.4
	412986	X81120	Hs.75110	cannabinoid receptor 1 (brain)	3.4
	422809	AK001379	Hs.121028	hypothetical protein FLJ10549	3.4
50	420050	AL118615	Hs.94653	neurochondrin	3.4
	431789	H19500	Hs.269222	mitogen-activated protein kinase 4	3.4
	408601	U47928	Hs.86122	protein A	3.4
	453740	AL120295	Hs.311809	ESTs, Moderately similar to PC4259 fem	3.4
	449919	A1674685	Hs.200141	ESTs	3.4
55	426380	A1291267	Hs.149990	ESTs	3.4
	408554	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	3.3
	443257	A1334040	Hs.11614	HSPC065 protein	3.3
	432731	R31178	Hs.287820	fibronectin 1	3.3
	421679	A1475110	Hs.203933	ESTs	3.3
60	453169	AB037815	Hs.32156	KIAA1394 protein	3.3
	437397	AA349847	Hs.4221	hypothetical protein DKFZp761H039	3.3
	443310	BE552018	Hs.133152	ESTs	3.3
	423169	BE047009	Hs.21837	ESTs, Weakly similar to KIAA0927 protein	3.3
	433657	A1244368	Hs.8124	PH domain containing protein in retina 1	3.3
65	408449	NM_004408	Hs.166161	dynamitin 1	3.3
	417402	BE503227	Hs.134759	ESTs	3.3
	416677	T83470	Hs.334840	ESTs, Moderately similar to I78885 serin	3.3
	439753	BE262233	Hs.7423	hypothetical protein from EUROIMAGE 2168	3.3
	455646	BE064420		gb:RC4-BT0311-241199-012-c08 BT0311 Homo	3.3
70	450337	A1693256	Hs.202427	ESTs	3.3
	423420	A1571364	Hs.126382	Homo sapiens mRNA; cDNA DKFZp761I1224 (f	3.3
	433236	NM_004296	Hs.3221	regulator of G-protein signaling 6	3.3
	417868	A1078534	Hs.122592	ESTs	3.3
	438207	AA334774	Hs.12845	hypothetical protein MGC13159	3.3
75	441607	NM_005010	Hs.7912	neuronal cell adhesion molecule	3.3
	449249	T52285	Hs.193115	Homo sapiens mRNA for KIAA1764 protein,	3.3
	418216	AA662240	Hs.283099	AF15q14 protein	3.3
	456060	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fts, clone MA	3.3
	449145	A1632122	Hs.198408	ESTs	3.3
80	415101	R45531	Hs.144534	ESTs	3.3
	401272			C9000559:gil12314195[emb]CAB99338.1 (A	3.3
	420297	A1628272	Hs.88323	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.3
	419991	A1000098	Hs.94210	eyes absent (Drosophila) homolog 1	3.3
	443761	A1525743	Hs.345187	ESTs	3.3

	427317	AB028955	Hs.175780	KIAA1032 protein	3.3
	426920	AA393351	Hs.132121	ESTs	3.3
	433894	AJ907682	Hs.243293	ESTs	3.3
	454253	AV660717	Hs.47144	DKFZP586N0819 protein	3.3
5	419647	AA348947	Hs.91816	hypothetical protein	3.3
	439978	BE139460	Hs.124673	Homo sapiens cDNA FLJ11477 fs, clone HE	3.3
	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfot	3.3
	428670	AA431682	Hs.134832	ESTs	3.3
	435375	AJ733610	Hs.187832	ESTs	3.3
10	419043	T19187	Hs.89566	ets variant gene 1	3.3
	403341			Target Exon	3.3
	436282	RS1913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	3.3
	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	3.3
	456209	W60633	Hs.297792	ESTs	3.3
15	438810	AW897846	Hs.6421	hypothetical protein DKFZp761N09121	3.3
	411565	AW851728		gb:MR2-CT0222-011199-007-d06 CT0222 Homo	3.3
	418203	X54942	Hs.83758	CDC28 protein kinase 2	3.3
	451254	AJ571016	Hs.172967	ESTs	3.3
20	435056	AW023337	Hs.5422	glycoprotein M6B	3.3
	433842	AJ652156	Hs.26346	ESTs	3.3
	433325	AW206988	Hs.143905	ESTs	3.3
	451066	AJ758660	Hs.206132	ESTs	3.3
	436114	AA778232	Hs.19515	ESTs, Highly similar to NRG3_HUMAN PRO-N	3.3
25	421688	AB011156	Hs.106794	KIAA0584 protein	3.3
	429228	AJ553633	Hs.326447	ESTs	3.3
	450325	AJ935962	Hs.26289	ESTs	3.3
	412350	AJ659306	Hs.73826	protein tyrosine phosphatase, non-recept	3.3
	451778	AJ826131	Hs.62954	ESTs, Weakly similar to zinc finger prot	3.3
30	435977	AL138079	Hs.5012	brain-specific membrane-anchored protein	3.2
	450475	AW805634	Hs.205015	ESTs	3.2
	418661	NM_001949	Hs.1189	E2F transcription factor 3	3.2
	436480	AJ271643	Hs.87469	putative acid-sensing ion channel	3.2
	407332	AJ801565	Hs.200113	Homo sapiens cDNA FLJ11379 fs, clone HE	3.2
35	415131	D61119		gb:HUM158C11B Clontech human fetal brain	3.2
	409248	AB033035	Hs.51965	KIAA1209 protein	3.2
	431462	AW583672	Hs.256311	granin-like neuroendocrine peptide precu	3.2
	434834	AF156774	Hs.324020	1-acylglycerol-3-phosphate O-acyltransfe	3.2
	450358	AB010098	Hs.24907	coronin, actin-binding protein, 2B	3.2
40	438461	AW075485	Hs.286049	phosphoserine aminotransferase	3.2
	405239	U89281		oxidative 3 alpha hydroxysteroid dehydro	3.2
	407304	AA565832	Hs.271649	gb:nj32b03.a1 NCI_CGAP_AA1 Homo sapiens	3.2
	451697	AW449774	Hs.296380	POM (POM121 rat homolog) and ZP3 fusion	3.2
	435071	D60683	Hs.35495	ESTs	3.2
45	420352	BE258835		gb:601117374F1 NIH_MGC_16 Homo sapiens c	3.2
	412193	AJ684467	Hs.144057	ESTs	3.2
	442320	AJ287817	Hs.129636	ESTs	3.2
	407378	AA299264	Hs.57776	ESTs, Moderately similar to I38022 hypot	3.2
	414528	AA148950	Hs.188836	ESTs	3.2
50	439764	T26535	Hs.22744	hypothetical protein MGC13105	3.2
	410425	BE278387	Hs.63510	KIAA0141 gene product	3.2
	429876	AB028977	Hs.225974	KIAA1054 protein	3.2
	427627	R87582	Hs.179915	guanine nucleotide binding protein (G pr	3.2
	439039	AJ656707	Hs.48713	ESTs	3.2
55	447925	AW292271	Hs.250718	ESTs	3.2
	447714	AW296313	Hs.255537	ESTs	3.2
	434574	AJ424458	Hs.33470	ESTs	3.2
	437269	AA334384	Hs.149420	ESTs	3.2
	416845	H95279	Hs.293788	ghyru20h02.s1 Soares fetal liver spleen	3.2
60	452234	AW084176	Hs.223298	ESTs, Weakly similar to I38022 hypotheti	3.2
	440274	R24595	Hs.7122	scrapie responsive protein 1	3.2
	437698	R61837	Hs.7890	ESTs, Moderately similar to I84505 calci	3.2
	414761	ALJ077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	3.2
	445828	F05802	Hs.81907	ESTs	3.2
65	423779	AW071837	Hs.57971	ESTs	3.2
	403790			NM_001334*:Homo sapiens cathepsin O (CTS	3.2
	453792	AL134539	Hs.254129	KIAA1678	3.2
	428167	AA770021	Hs.16332	ESTs	3.2
	445413	AA151342	Hs.12677	CGI-147 protein	3.2
70	415314	N88802	Hs.5422	glycoprotein M6B	3.2
	425115	RA4664	Hs.123956	ESTs	3.2
	432625	AJ243596	Hs.94830	ESTs, Moderately similar to T03094 A-kin	3.2
	412420	AL035668	Hs.73853	bone morphogenetic protein 2	3.1
	422772	AL119585	Hs.120228	KIAA0749 protein	3.1
75	437414	AW894071	Hs.48448	hypothetical protein DKFZp547C176	3.1
	427981	AW293165	Hs.143134	ESTs	3.1
	435256	AF193766	Hs.13872	cytokine-like protein C17	3.1
	428966	AF059214	Hs.194687	cholesterol 25-hydroxylase	3.1
	413995	BE048146	Hs.75671	syntactin 1A (brain)	3.1
80	443431	AJ056847	Hs.20654	ESTs	3.1
	414217	AJ309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	3.1
	419617	AL008583	Hs.91622	neuronal pentraxin receptor	3.1
	444326	AF939357	Hs.270710	ESTs	3.1
	436315	BE390513	Hs.27935	hypothetical protein MGCA4837	3.1

5	446131	NM_000929	Hs.290	phospholipase A2, group V	3.1
	423858	AL137326	Hs.133483	Homo sapiens mRNA; cDNA DKFZp434B0650 (f	3.1
	448475	BE613134	Hs.247474	hypothetical protein FLJ21032	3.1
	432682	AI376400	Hs.159588	ESTs	3.1
	450661	AW952160	Hs.83849	ESTs	3.1
	417636	R08916	Hs.191212	ESTs	3.1
	417918	AA209205	Hs.163754	hypothetical protein FLJ12606	3.1
	454032	W31790	Hs.194293	ESTs, Weakly similar to U54374 gene NF2	3.1
10	443150	A1034467	Hs.34650	ESTs	3.1
	404632			NM_022490:Homo sapiens hypothetical prot	3.1
	425537	AB007913	Hs.158291	KIAA0444 protein	3.1
	437162	AW005505	Hs.5464	thyroid hormone receptor coactivating pr	3.1
	400090			Eos Control	3.1
15	445424	AB028945	Hs.12696	contactin SH3 domain-binding protein	3.1
	422949	AA319435		gb:EST21657 Adrenal gland tumor Homo sap	3.1
	448750	U95020	Hs.21903	calcium channel, voltage-dependent, beta	3.1
	433560	AI925195	Hs.130891	hypothetical protein MGC4400	3.1
	453042	AW193534	Hs.281895	Homo sapiens cDNA FLJ11660 fls, clone HE	3.1
20	449722	BE280074	Hs.23960	cyclin B1	3.1
	425480	AB023198	Hs.158135	KIAA0981 protein	3.1
	449670	F07693	Hs.85603	Homo sapiens mRNA; cDNA DKFZp434K2172 (f	3.1
	452619	AW288597	Hs.61884	Homo sapiens, clone IMAGE:4298026, mRNA,	3.1
	428722	U76456	Hs.190787	tissue inhibitor of metalloproteinase 4	3.1
25	405605			C2001342.gi127814[sp]P26434[NA]M_RAT SO	3.1
	417565	AI203405	Hs.47831	ESTs	3.1
	439538	AA837323	Hs.56407	ESTs	3.1
	414117	W88559	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	3.1
30	430818	AI311928	Hs.348156	gb:q88h04.x1 NCI_CGAP_Kid5 Homo sapiens	3.1
	408508	AI806109	Hs.135736	KIAA1580 protein	3.1
	414884	R54418	Hs.183745	hypothetical protein FLJ13456	3.1
	439963	AW247529	Hs.6793	platelet-activating factor acetylhydrola	3.1
	446836	AC002563	Hs.15767	ctron (rho-interacting, serine/threonin	3.1
	417169	R13550	Hs.248773	ESTs	3.1
35	450202	AW969756	Hs.34145	ESTs, Weakly similar to B49647 GTP-bindi	3.1
	428060	AA420616	Hs.249483	ESTs	3.1
	430526	AF181862	Hs.242407	G protein-coupled receptor, family C, gr	3.1
	421458	NM_003654	Hs.104576	carbohydrate (keratan sulfate Gal-6) sul	3.1
40	429163	AA884766		gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo s	3.0
	428180	AI129767	Hs.182874	guanine nucleotide binding protein (G pr	3.0
	422631	BE218919	Hs.118793	hypothetical protein FLJ10688	3.0
	433290	R20077	Hs.302185	Homo sapiens clone Z3618 mRNA sequence	3.0
	412507	L36645	Hs.73964	EphA4	3.0
	415827	H17462	Hs.23079	ESTs	3.0
45	429609	AF002246	Hs.210863	cell adhesion molecule with homology to	3.0
	457358	AI479755	Hs.129010	ESTs	3.0
	441732	AW288818	Hs.127341	ESTs	3.0
	459318	NM_000038		gb:Homo sapiens adenomatosis polyposi c	3.0
50	426384	AI472078	Hs.303662	hypothetical protein FLJ13189 (FLJ13189)	3.0
	436267	AW450938	Hs.180115	ESTs	3.0
	450650	T65617	Hs.101257	hypothetical protein MGC3295	3.0
	414865	AA157155	Hs.274414	hypothetical protein FLJ14457	3.0
	459080	AW192083	Hs.290855	ESTs	3.0
55	412783	BE276738	Hs.74578	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	3.0
	432593	AW301003	Hs.51483	ESTs, Weakly similar to hypothetical pro	3.0
	443753	AW367578	Hs.134749	ESTs	3.0
	445921	AW015211	Hs.146181	ESTs	3.0
	427695	R88483	Hs.172862	ESTs	3.0
	438283	AI458931	Hs.37282	ESTs	3.0
60	453324	W26592	Hs.232089	ESTs	3.0
	421094	AW978202	Hs.289064	hypothetical protein FLJ22251	3.0
	433434	AA588429		gb:no22b03.s1 NCI_CGAP_Pr22 Homo sapiens	3.0
	452850	H23230	Hs.22481	ESTs, Moderately similar to A46010 X-En	3.0
	416658	U03272	Hs.79432	fibrillin 2 (congenital contractural ara	3.0
65	429569	AA454993	Hs.138343	ESTs, Weakly similar to I78885 serine/th	3.0
	428500	AW863261	Hs.242413	hypothetical protein DKFZp434K1421	3.0
	443633	AL031290	Hs.9654	similar to pregnancy-associated plasma p	3.0
	433229	AB040925	Hs.91625	KIAA1492 protein	3.0
	429046	X57436	Hs.194772	oligodendrocyte myelin glycoprotein	3.0
70	431431	AL096711	Hs.252953	Human DNA sequence from clone RP3-403A15	3.0
	414430	AI346201	Hs.76118	ubiquitin carboxyl-terminal esterase L1	3.0
	423165	AW937547	Hs.124915	hypothetical protein MGC2601	3.0
	440261	M81886	Hs.7117	glutamate receptor, ionotropic, AMPA 1	3.0
	441364	AW450466	Hs.126830	ESTs, Weakly similar to YD38_YEAST HYPOT	3.0
75	437056	AI147061		gb:ok33a11.s1 Soares_NSF_F8_9W_OT_PA_P_S	3.0
	429168	AA984682	Hs.146589	ESTs, Weakly similar to JC5238 galactosy	3.0
	453739	AL120266		ESTs	3.0

TABLE 158:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Pkey CAT Number Accession



410099	117647_1	AA081630 T08671 AI174254 D83874 AW959843 AA364503 AA693467 AW993370 BE327037 AA167714 N79906 AW901977 AW901980 W52882 T07735 AA484549 W60090 D52685 T23811 BE327043 AW901768 BE551237 AA917004 AA716027 AA39658 AA283724 AI805992 AI457096 AA084618 BE467736 AI092635 AI887853 AI697593 AA436618 AI167419 AI18534 T31585 AA436630 AA706191 AI041169 AI422304 T03534 AA211402 AI204899 AI364722 AW827081 AA788593 T32736 AI767935 AA167791 AA747914 AA663870 AI865504 BE169274 AW957730 AA210998 H24222 AA081774 BE000935 BE000834 AA334880 AW851728 AW851607 AW851621 AW851702 AW851647 AW851727 AW851658 AW851617 AW851628 AI267606 AA121045 AA126521 H06382 AW957730 AA352014 R13591 AA121201 D60420 BE263253 BE047852 Z41952 AI424991 AI693507 AI863108 AA599060 AI091148 AA598689 R39887 AA813482 AW016452 H06383 R41807 AI364268 AA620528 AI241940 AW089149 AW090733 AW088875 Z38240 AA121202 R17734 BE001236 BE001177 BE001180 BE001234 AA143654 AW753140 AA213770 AW970865 AA569075 AA492132 D61119 D81508 D81734 H98716 N90792 N24283 AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D64678 T08951 R15346 AW953188 AA350074 AW890649 AI909154 AA526337 AA244193 AI909153 AA255652 AA280911 AW967920 AA262684 BE258835 AW968318 AA258918 AW843305 R14744 AI580388 BE071923 R36280 AA319435 N58458 AA319377 AW961532 T48452 AA894424 AL035633 F11794 F11783 H18042 T66089 H29379 R19493 AW134660 AI299437 AL133995 AA057405 N78357 AA917450 A8002692 T09262 T65008 H29290 AI200874 AA894415 AI732887 AI791768 AI733447 AA988785 N62128 T09261 AW956938 M19650 R18810 R18721 AW896146 AW889520 AA192362 AA176814 F12085 BE265264 BE251393 T65248 AA380585 AA380465 BE408684 AA459037 AW498869 AA776107 BE274289 D45269 M61958 AA378818 AW663180 AW672958 H08511 M78164 BE393721 AA348660 R36303 AW498662 AA019090 AA001087 AA054302 AA019775 AA018808 AA019132 AI858240 R73218 H30477 H17776 AA659670 BE276750 AL118657 AA375861 AA352427 AW581695 AI141188 N63474 AA654162 H17659 AL120696 T28867 AW498868 AI355918 AA902349 AA569098 AI088231 AI042604 AA555133 AI183611 AI608822 AI275941 AW316805 AA349486 AI355233 R85117 AW613626 R49234 AA458848 N0669 H18693 AA977567 T15423 AW002084 AI824721 N36242 AI417281 AI018212 AA912337 F09722 AA749449 AW879172 AA885427 AA916839 AI872560 F00482 H45184 AI217251 AA775807 BE390071 AA303517 AA001050 BE515169 N44066 AL133684 AI807085 AA808009 AA915914 F00007 AA019749 AL121560 AW675544 AW090233 AW072071 AI810932 AI089733 AW026222 AA770155 AI089647 AI085733 AW516061 AI037636 AL037635 AI863947 H50420 R11203 AA019133 N94772 H71842 N29047 AA778138 AA554336 AA179865 N59453 T65212 AA054270 AW806630 AA533375 D13146 AA349487 AU077160 BE255671 BE276795 BE250823 AL120301 BE311390 BE252483 AI221919 T19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 AI341345 AW298800 AA724961 AA931158 AI741227 AI806660 AI982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 AI492861 AI361526 F04002 AA452141 T23551 AI472655 AI193667 AI341984 N92658 T32870 R52664 N50428 AW089291 AI934175 AI423737 D60665 R77952 AA348809 AW959960 AW959962 AI565552 AW070702 AA973910 R85973 AW962128 AA355353 AA427363 AA377823 AW954494 AI022688 AA380153 AA380233 AW963529 AL041228 D82004 D61361 AI203314 AI990307 AW900295 AI018308 AW087473 AW183530 AA393346 H50055 AA935601 AI739168 AA426249 AI199636 AW505198 AW977291 AA824583 AA883419 AA724079 AI015524 AI377728 AW293682 AI928140 AA731438 AI092404 AI085630 AA731340 D80642 AA443145 AL119015 AW904500 AA884766 AW974271 AA592875 AA447312 AL031658 AI693758 AL040619 AW977914 AA811957 AI352198 AW104364 AA648367 AA897604 AW341668 AI201382 AL040620 BE010038 AA676833 AI311783 T86895 W68032 BE064393 BE064394 BE157228 BE183282 AI936370 AA552514 T67280 AA039909 AF084866 AF084870 AF084864 AF084867 AF084869 AF084865 AF084868 AW818206 AW812038 BE144813 BE144812 AW812041 AW812040 AW812067 BE061583 BE061604 T05808 AI352469 AA580921 BE141783 BE141782 BE061601 AW814393 AW885029 AW972830 AA527647 AA489820 AA570362 AA761668 AA573621 R82814 R09670 AA588429 AI972567 AW504832 AI299694 H29882 AW665533 AW149901 AI572917 AA598500 AI686466 AI336390 AW864390 AW864320 AA687376 H74234 AW975503 AA742643 AA808575 AW976668 AI147061 AA743380 AA765223 AW976398 AI803927 AW975186 AA807807 D29548 AL133916 N79113 AF088101 N76721 AW950828 AA364013 AW955684 AI346341 AI867454 N54784 AI655270 AI421279 AW014882 AA775552 N62351 N59253 AA626243 AI341407 BE175639 AA458968 AI358918 AA457077 W76326 AF086341 W72300 AF086387 W77884 W72711 AA973905 AI299888 AA917019 H63235 T90771 Z44514 AI352097 AI803984 AW235923 AW196558 AI954637 AI336983 R36075 AI366546 R36167 AI458682 H24240 R14537 R18426 AW857082 NM_014253 AF100772 BE088769 AL022718 BE181779 AW863569 BE161640 AL039060 BE168542 AW296554 AA323193 AA235370 AW779760 N48674 AI375997 R45432 D59344 AI203107 F07491 R35380 R25094 AI913631 AI498402 T61382 AI016320 N45526 T61415 AA331486 AA009847 AA131254 AA374293 AW954405 H04410 AW606284 AA151186 BE157467 BE157601 H04384 W46291 AW663674 H04021 H01532 AA190993 H03231 H59605 H01642 AA852876 AA113758 AA626915 AA746952 AI161014 AA099554 R69067 AI339732 AA010300 AW515041 AA768334 N29860 AA425874 AA425118 AA855829 AW936878 AW118072 AI631982 T15734 AA224185 AI701458 W20198 F26326 AA890570 N90552 AW071907 AI671352 AI375892 T03517 R88265 AI124088 AA224388 AI084316 AI354686 T33652 AI140719 AI720211 T03490 AI372637 T15415 AW205836 AA630384 T03515 T33230 AA017131 AA443303 T33623 AI222556 T33511 T33785 AI419608 D55612 AI240665 T53681 N77468 H51833 AA147247 R75732 C18450 R73999 AI095755 T49904 H03868 AA411580 R33395 AA410586 T48869 D63292 R31981 H12498 H02668 AA035018 R75957 AI803329 R27528 R36203 AI809932 AI808765 R78948 AA411449 AA976929 AI378760 AI378620 T48870 R73906 R75632 H03812 AA909684 N50695 H02580 H12839 N58781 AA742532 AI360919 H03502 BE208298 R66588 AI350463 R31935 AW069127 AA411621 R25671 R36105 H12451 H03869 H51263 AA035486 R25109 R25110 AA147933 AL120266 AW269469 AW890114 AW854832 AW854798 AW854857 AW854816 AW854834 AW854817 BE064420 BE064435 BE064429 BE064414 BE064400 BE064517 AI911066 AI933734 AI680888 AI003599
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TABLE 15C:

Pkey:

Unique number corresponding to an Eos probelet

Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

Strand: Indicates DNA strand from which exons were predicted.

NT\_position: Indicates nucleotide positions of predicted exons.

5	Pkey	Ref	Strand	NT_position
	400533	6981826	Minus	277132-277595
	400777	8131663	Plus	70745-71121
10	401272	9797373	Minus	98374-98509
	402145	8018280	Plus	113086-114800
	402604	9909420	Plus	20393-20767
	402605	9909420	Minus	47680-47973
	402855	9662953	Minus	59763-59909
	403142	9444521	Plus	89286-90131
15	403341	8569175	Plus	30699-30910
	403696	3135242	Minus	143467-143634
	403790	8084957	Minus	87826-87947,89835-90002
	404150	7534008	Plus	165811-165943
20	404283	2276311	Minus	99460-99564
	404541	8318559	Plus	103456-103664
	404584	9857511	Plus	138651-139153
	404632	9796668	Plus	45096-45229
	404819	4878240	Plus	16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578
	405238	7249119	Minus	51728-51836
25	405239	7249119	Plus	144345-144464,144690-144836,151750-151883,152407-152484
	405348	2914717	Minus	43310-43462
	405605	5836195	Minus	117070-117270
	405819	4007557	Plus	2830-2967

TABLE 16A: ABOUT 859 GENES UP-REGULATED IN GLIOBLASTOMA MULTIFORMA COMPARED TO NORMAL CENTRAL NERVOUS SYSTEM

Table 16A lists about 859 genes up-regulated in glioblastoma multiforma (GBM) compared to normal central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu30 GeneChip array such that the ratio of "average" LGG to "average" CNS tissues was greater than or equal to 3.0. The "average" GBM level was set to the 85<sup>th</sup> percentile amongst various GBM tumors. The "average" normal CNS tissue level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of GLIOBLASTOMA MULTIFORMA to CNS

	Pkey	ExAccn	UnigenID	Unigene Title	R1
45	414555	N98569	Hs.76422	phospholipase A2, group IIA (platelets,	47.2
	422737	M26939	Hs.119571	collagen, type III, alpha 1 (Ehlers-Danl	44.9
	423961	D13666	Hs.136348	periostin (OSF-2os)	33.3
	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	25.9
	449539	V80383	Hs.58446	ESTs	25.8
	417308	H60720	Hs.81892	KIAA0101 gene product	23.3
50	424800	AL035588	Hs.153203	MyoD family inhibitor	23.0
	414825	X06370	Hs.77432	epidermal growth factor receptor (avian	19.6
	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fs, clone CO	18.7
	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	17.8
55	444190	AJ878918	Hs.10526	cysteine and glycine-rich protein 2	17.8
	428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	17.7
	417130	AW276858	Hs.81256	S100 calcium-binding protein A4 (calcium	17.5
	414217	AJ309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	17.0
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	15.9
	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kD)	15.6
60	424835	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fs, clone PL	15.2
	408243	Y00787	Hs.624	Interleukin 8	14.7
	422672	X12784	Hs.119129	collagen, type IV, alpha 1	14.7
	434078	AW880709	Hs.283683	chromosome 8 open reading frame 4	14.6
	409799	D11928	Hs.76845	phosphoserine phosphatase-like	14.2
65	414761	AU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	14.2
	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	14.1
	446584	U53445	Hs.15432	downregulated in ovarian cancer 1	14.0
	444969	AJ203334	Hs.160628	ESTs	13.5
	430691	C14187	Hs.103538	ESTs	12.9
70	426075	AW513691	Hs.270149	ESTs, Weakly similar to 2109260A B cell	12.4
	445101	T75202	Hs.12314	Homo sapiens mRNA: cDNA DKFZp586C1019 (f	12.1
	441269	AW015206	Hs.178784	ESTs	11.9
	417426	NM_002291	Hs.82124	laminin, beta 1	11.9
75	430132	AA204688	Hs.234149	hypothetical protein FLJ20647	11.8
	422163	AF027208	Hs.112360	prominin (mouse)-like 1	11.3
	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	11.3
	449722	BE280074	Hs.23960	cyclin B1	11.2
	436291	BE568452	Hs.344037	protein regulator of cytokinesis 1	11.0
80	435020	AW505076	Hs.301855	DiGeorge syndrome critical region gene 8	10.9
	412140	AA219691	Hs.73625	RAB6 interacting, kinesin-like (rabkines	10.9
	419239	AA468183	Hs.184598	Homo sapiens cDNA: FLJ23241 fs, clone C	10.6
	417043	NM_004369	Hs.80968	collagen, type VI, alpha 3	10.6
	413929	BE501689	Hs.75617	collagen, type IV, alpha 2	10.6

	420602	AF060877	Hs.99236	regulator of G-protein signaling 20	10.6
	409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromosome	10.4
	406972	M32053		gb:Human H19 RNA gene, complete cds.	10.4
5	412886	X81120	Hs.75110	cannabinoid receptor 1 (brain)	10.3
	419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C (CFTR	10.3
	449611	AF970394	Hs.197075	ESTs	10.1
	427581	NM_014788	Hs.179703	KIAA0129 gene product	10.1
	431512	BE270734	Hs.2795	lactate dehydrogenase A	9.9
10	429183	AB014604	Hs.197955	KIAA0704 protein	9.8
	433437	U20536	Hs.3280	caspase 6, apoptosis-related cysteine pr	9.7
	424840	D79887	Hs.153479	extra spindle poles, S. cerevisiae, homo	9.7
	433800	AI034361	Hs.135150	lung type-I cell membrane-associated gly	9.7
	433647	AA603367	Hs.222294	ESTs	9.7
	414622	AF52666	Hs.76669	nicotinamide N-methyltransferase	9.5
15	413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	9.3
	409461	AA382169	Hs.54483	N-myc (and STAT) interactor	9.3
	409902	AI337658	Hs.156351	ESTs	9.3
	450375	AA009647		a disintegrin and metalloproteinase doma	9.2
20	445873	AA250970	Hs.251946	poly(A)-binding protein, cytoplasmic 1-4	9.1
	442802	AL133035	Hs.8728	hypothetical protein DKFZp434G171	9.1
	452461	N78223	Hs.108106	transcription factor	9.1
	434846	AW295389	Hs.119768	ESTs	9.1
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	9.0
	425187	AW014485	Hs.22509	ESTs	9.0
25	443247	BE614387	Hs.333893	c-Myc target JPO1	8.7
	458079	AI796870	Hs.54277	DNA segment on chromosome X (unique) 992	8.7
	410276	AI554545	Hs.68301	angiopoietin-2	8.6
	402855			NM_001839: Homo sapiens calponin 3, acid	8.6
30	439710	AF086543		gb:Homo sapiens full length insert cDNA	8.6
	411968	AI207410	Hs.69280	Homo sapiens, clone IMAGE:3636299, mRNA,	8.6
	410102	AW248508	Hs.279727	ESTs; homologue of PEM-3 (Ciona savignyi)	8.6
	436895	AF037335	Hs.5338	carbonic anhydrase XII	8.6
	418203	X54942	Hs.83758	CDC28 protein kinase 2	8.6
	416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	8.5
35	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypothesi	8.5
	449961	AW265634	Hs.133100	ESTs	8.5
	449444	AW818436	Hs.23590	solute carrier family 16 (monocarboxylic	8.4
	417061	AF675944	Hs.188691	Homo sapiens cDNA FLJ12033 fs, clone HE	8.3
40	453884	AA355925	Hs.36232	KIAA0186 gene product	8.3
	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	8.2
	419938	AU076772	Hs.1279	complement component 1, r subcomponent	8.1
	411078	AI222020	Hs.182364	CocoaCrisp	8.1
	406850	AI624300	Hs.172928	collagen, type 1, alpha 1	8.0
45	447726	AL137638	Hs.19368	matrilin 2	8.0
	439999	AA115811	Hs.6838	ras homolog gene family, member E	8.0
	416658	U03272	Hs.79432	fibrillin 2 (congenital contractural ara	7.9
	439451	AF086270	Hs.278554	heterochromatin-like protein 1	7.9
	458814	AI498957	Hs.170861	ESTs, Weakly similar to Z195_HUMAN ZINC	7.9
50	447004	AW296968	Hs.157539	ESTs	7.9
	436140	W87355	Hs.269587	ESTs	7.9
	436607	AW661783	Hs.211061	ESTs	7.8
	422809	AK001379	Hs.121028	hypothetical protein FLJ10549	7.7
	440052	AI633744	Hs.195648	ESTs, Weakly similar to I38022 hypothesi	7.7
55	422106	D84239	Hs.111732	Fc fragment of IgG binding protein	7.7
	418113	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	7.7
	410286	AI739159	Hs.61898	DKFZP586N2124 protein	7.7
	424887	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	7.6
	422048	NM_012445	Hs.288126	spondin 2, extracellular matrix protein	7.6
60	421988	AW450481	Hs.161333	ESTs	7.6
	452620	AA436504	Hs.119286	ESTs	7.6
	453941	U39817	Hs.36820	Bloom syndrome	7.5
	416737	AF154335	Hs.79691	LIM domain protein	7.5
	425289	AW139342	Hs.155530	interferon, gamma-inducible protein 16	7.5
65	418400	BE243026	Hs.301989	KIAA0246 protein	7.5
	437038	AI571514	Hs.133022	ESTs	7.5
	421899	AJ011895	Hs.109281	Nef-associated factor 1	7.4
	409731	AA125985	Hs.56145	thymosin, beta, identified in neuroblast	7.4
	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S.	7.4
70	427871	AW992405	Hs.59622	Homo sapiens, clone IMAGE:3507281, mRNA,	7.3
	448935	AL078596	Hs.22581	nuclear receptor subfamily 2, group E, m	7.3
	415079	R43179	Hs.22895	hypothetical protein FLJ23548	7.3
	449571	AW016812	Hs.200266	ESTs	7.3
	427899	AA829286	Hs.332053	serum amyloid A1	7.3
75	447458	AI741082	Hs.158961	ESTs	7.3
	430630	AW269920	Hs.2621	cystatin A (stefin A)	7.2
	411252	AB018549	Hs.69328	MD-2 protein	7.2
	432731	R31178	Hs.287820	fibronectin 1	7.2
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	7.2
80	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfot	7.2
	428728	NM_016625	Hs.191381	hypothetical protein	7.1
	416111	AA033813	Hs.78018	chromatin assembly factor 1, subunit A (	7.1
	432281	AK001239	Hs.274263	hypothetical protein FLJ10377	7.1
	410434	AF051152	Hs.63668	tol-like receptor 2	7.1

	420018	U56387	Hs.94376	proprotein convertase subtilisin/kexin 1	7.1
	418293	A1224483	Hs.16063	hypothetical protein FLJ21877	7.1
	424954	NM_000546	Hs.1846	tumor protein p53 (Li-Fraumeni syndrome)	7.0
5	445900	AF070526	Hs.125036	Homo sapiens clone 24787 mRNA sequence	7.0
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	7.0
	422283	AW411307	Hs.114311	CDC45 (cell division cycle 45, S.cerevis)	7.0
	434808	AF155108	Hs.256150	Homo sapiens, Similar to RIKEN cDNA 2810	6.9
	416847	L43821	Hs.80261	enhancer of filamentation 1 (cas-like do	6.9
	424381	AA285249	Hs.146329	protein kinase Chk2	6.9
10	410064	X53416	Hs.185464	filamin A, alpha (actin-binding protein-	6.9
	415682	A1347128	Hs.191870	ESTs	6.9
	421977	W84197	Hs.110165	ribosomal protein L26 homolog	6.8
	429447	AW812452	Hs.83286	ESTs, Weakly similar to S14747 sphingomy	6.8
	423198	M81933	Hs.1634	cell division cycle 25A	6.8
15	413627	BE182082	Hs.246973	ESTs	6.8
	412777	AJ355773	Hs.270123	ESTs	6.8
	409829	M33552	Hs.56729	lymphocyte-specific protein 1	6.8
	451129	BE072681		gb:RC2-BT0548-200300-012-e09 BT0548 Homo	6.8
20	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypothesi	6.7
	446131	NM_000929	Hs.290	phospholipase A2, group V	6.7
	441703	AW390054	Hs.192843	leucine zipper protein FKSG14	6.7
	420311	AW445044	Hs.38207	Human DNA sequence from clone RP4-530115	6.7
	425202	AW962282	Hs.152049	ESTs, Weakly similar to I38022 hypothesi	6.7
25	408161	AW952912	Hs.300383	hypothetical protein MGC3032	6.7
	440704	M69241	Hs.162	insulin-like growth factor binding prote	6.7
	407182	AA312551	Hs.230157	ESTs	6.7
	445837	AJ261700	Hs.145544	ESTs	6.6
	433378	AJ249381	Hs.74122	caspase 4, apoptosis-related cysteine pr	6.6
30	431211	M86849	Hs.323733	gap junction protein, beta 2, 26kD (conn	6.6
	447439	AA313565	Hs.145020	ESTs, Weakly similar to KIAA1205 protein	6.5
	407235	D20569	Hs.169407	SAC2 (suppressor of actin mutations 2, y	6.5
	450506	NM_004460		fibroblast activation protein, alpha	6.5
	432593	AW301003	Hs.51483	ESTs, Weakly similar to hypothetical pro	6.5
35	418054	NM_002318	Hs.83354	lysyl oxidase-like 2	6.5
	452799	AJ948829	Hs.213788	ESTs	6.5
	446657	AJ335191	Hs.260702	ESTs, Weakly similar to 2109260A B cell	6.4
	424247	X14008	Hs.234734	lysosyme (renal amyloidosis)	6.4
	443884	N20617	Hs.194397	leptin receptor	6.4
40	420560	AW207748	Hs.59115	ESTs	6.4
	419485	AA489023	Hs.99807	ESTs, Weakly similar to unnamed protein	6.3
	420649	AJ866964	Hs.124704	ESTs, Moderately similar to S65657 alpha	6.3
	457465	AW301344	Hs.122908	DNA replication factor	6.3
	440332	AJ218517	Hs.188051	ESTs	6.3
45	449246	AW411209	Hs.23363	hypothetical protein FLJ10983	6.3
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	6.2
	448275	BE514434	Hs.20830	kinesin-like 2	6.2
	440286	U29589	Hs.7138	cholinergic receptor, muscarinic 3	6.2
	439518	W76326		gb:zd60d04.r1 Soares_fetal_heart_NbHH19W	6.1
50	412567	AJ750979	Hs.74034	Homo sapiens clone 24651 mRNA sequence	6.1
	426935	NM_000088	Hs.172928	collagen, type I, alpha 1	6.1
	456977	AK000252	Hs.169758	hypothetical protein FLJ20245	6.1
	428450	NM_014791	Hs.184339	KIAA0175 gene product	6.0
	412125	Y17114	Hs.73393	eyes absent (Drosophila) homolog 4	6.0
55	413786	AW613780	Hs.13500	ESTs	6.0
	410555	U92649	Hs.64311	a disintegrin and metalloproteinase doma	5.9
	400419	AF084545		Target	5.9
	408380	AF123050	Hs.44532	diubiquitin	5.9
	426108	AA522037	Hs.166468	programmed cell death 5	5.9
60	418774	X02419	Hs.77274	plasminogen activator, urokinase	5.9
	437695	AA769202	Hs.192142	ESTs	5.8
	409463	AI458165	Hs.17296	hypothetical protein MGC2376	5.8
	411048	AK001742	Hs.67991	hypothetical protein DKFZp434G0522	5.8
	443731	AJ083928	Hs.145418	ESTs	5.8
	405558			Target Exon	5.8
65	422094	AF129535	Hs.272027	F-box only protein 5	5.8
	429113	D26235	Hs.196384	prostaglandin-endoperoxide synthase 2 (p	5.8
	425882	U83115	Hs.181002	absent in melanoma 1	5.8
	412471	M83193	Hs.73946	endothelial cell growth factor 1 (plate	5.8
70	429149	AW193360	Hs.197952	ESTs, Weakly similar to I38022 hypothesi	5.8
	436827	H72187	Hs.5322	guanine nucleotide binding protein (G pr	5.7
	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger	5.7
	414053	BE391635	Hs.75725	transgain 2	5.7
	435805	AA731533	Hs.270751	ESTs	5.7
75	442201	AW516704	Hs.208726	ESTs	5.7
	453361	AA035197	Hs.107375	ESTs	5.6
	429083	Y09397	Hs.227817	BCL2-related protein A1	5.6
	426490	NM_001621	Hs.170087	aryl hydrocarbon receptor	5.6
	423081	AF262992	Hs.123159	sperm associated antigen 4	5.6
80	407013	U35637		gb:Human nebulin mRNA, partial cds	5.5
	406478			Target Exon	5.5
	435937	AA830893	Hs.119769	ESTs	5.5
	453362	H14988	Hs.107375	ESTs	5.5
	449969	AW295142	Hs.180187	Homo sapiens cDNA FLJ14337 fls, clone PL	5.5

	442547	AA306997	Hs.217484	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.5
	443883	AA114212	Hs.9930	serine (or cysteine) proteinase inhibito	5.5
	429643	AA455889	Hs.167279	FYVE-finger-containing Rab5 effector pro	5.5
	407862	BE548267	Hs.337986	Homo sapiens cDNA FLJ10934 fs, clone OV	5.4
5	407624	AW157431	Hs.248941	ESTs	5.4
	448769	N66037	Hs.38173	ESTs	5.4
	417124	BE122762	Hs.25338	ESTs	5.4
	422493	AW474183	Hs.250173	hypothetical protein FLJ13158	5.4
	457292	AJ921270	Hs.281462	hypothetical protein FLJ14251	5.3
10	418596	AW976721	Hs.293327	ESTs	5.3
	410295	AA741357	Hs.5174	nidogen (enactin)	5.3
	433323	AA805132	Hs.159142	ESTs	5.3
	412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	5.3
	418630	AJ351311	Hs.251946	poly(A)-binding protein, cytoplasmic 1-I	5.3
15	420075	AF142482	Hs.203846	TEA domain family member 3	5.2
	427676	AA394062	Hs.300772	tropomyosin 2 (beta)	5.2
	407729	T40707	Hs.270862	ESTs	5.2
	416908	AA333990	Hs.80424	coagulation factor XIII, A1 polypeptide	5.2
20	414372	AA143654		gb:z065a02.r1 Stratagene pancreas (93720	5.2
	433556	W56321	Hs.111460	calcium/calmodulin-dependent protein kin	5.2
	424998	U58515	Hs.154138	chitinase 3-like 2	5.2
	407603	AW955705	Hs.62604	Homo sapiens, clone IMAGE:4299322, mRNA,	5.2
	445118	AJ208762	Hs.345572	ESTs	5.2
	408523	AW833259	Hs.314287	ESTs	5.2
25	412530	AA766268	Hs.266273	hypothetical protein FLJ13348	5.2
	449300	AJ866959	Hs.346514	ESTs	5.2
	429732	U20158	Hs.2488	lymphocyte cytosolic protein 2 (SH2 doma	5.2
	423757	AL049337	Hs.132571	Homo sapiens mRNA; cDNA DKFZp564P016 (fr	5.1
30	439570	T79925	Hs.269165	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.1
	415323	BE269352	Hs.949	neutrophil cytosolic factor 2 (65kD, chr	5.1
	443604	C03577	Hs.9615	myosin regulatory light chain 2, smooth	5.1
	421247	BE391727	Hs.102910	general transcription factor IIH, polype	5.1
	416913	AW934714		gb:RC1-OT0001-031299-011-a11 OT0001 Homo	5.1
35	419968	X04430	Hs.93913	Interleukin 6 (interferon, beta 2)	5.0
	424009	F11690		gb:HSC30D041 normalized infant brain cDN	5.0
	418283	S79895	Hs.83942	cathepsin K (pycnodystosis)	5.0
	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	5.0
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	5.0
40	408829	NM_006042	Hs.48384	heparan sulfate (glucosamine) 3-O-sulfot	5.0
	418097	R45137	Hs.21868	ESTs	5.0
	453331	AJ240665		ESTs	4.9
	429433	AA452899	Hs.213586	ESTs, Weakly similar to KIAA1353 protein	4.9
	426044	AA502490	Hs.170290	ESTs	4.9
45	444161	N52543	Hs.142940	ESTs	4.9
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	4.9
	432242	AW022715	Hs.162160	ESTs, Weakly similar to ALU4_HUMAN ALU S	4.9
	447752	M73700	Hs.105938	lactotransferrin	4.9
	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	4.9
50	402274			C19000498:gil4567179 gb AAD23607.1 AC00	4.9
	444656	AJ277924	Hs.145199	ESTs	4.9
	422087	X58968	Hs.111301	matrix metalloproteinase 2 (gelatinase A	4.9
	443744	AJ084326	Hs.271548	ESTs, Weakly similar to I78885 serine/thr	4.9
	416871	H98716		gb:yx13d08.s1 Soares melanocyte 2NbHM Ho	4.9
55	409112	BE243971	Hs.50849	quinone oxidoreductase homolog	4.8
	403481			Target Exon	4.8
	443740	R56434	Hs.21062	ESTs	4.8
	435005	U80743	Hs.306094	trinucleotide repeat containing 12	4.8
	429163	AA884766		gb:am20a10.s1 Soares_NFL_T_G8C_S1 Homo s	4.8
60	451418	BE387790	Hs.26369	hypothetical protein FLJ20287	4.8
	428403	AJ393048	Hs.326159	leucine rich repeat (in FLJ) Interactin	4.8
	430968	AW972830		gb:EST384925 MAGC resequences, MAGL Homo	4.8
	425212	AW962253	Hs.171618	ESTs	4.8
	409205	AJ952884	Hs.14832	ESTs, Moderately similar to unnamed prot	4.8
65	431176	AJ026984	Hs.293662	ESTs	4.8
	420092	AA814043	Hs.88045	ESTs	4.8
	437834	AA769294	Hs.283854	gb:nz36g03.s1 NCL_CGAP_GCB1 Homo sapiens	4.8
	432363	AA534489		gb:nf76g11.s1 NCL_CGAP_Co3 Homo sapiens	4.8
	403011			ENSP00000215330:Probable serine/threonin	4.7
70	405348			C7001664:gil12698061 db BAB21849.1  (AB	4.7
	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	4.7
	443318	AJ051603	Hs.133141	ESTs	4.7
	421027	AA761198	Hs.55254	ESTs	4.7
	449318	AW236021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	4.7
75	429170	NM_001394	Hs.2359	dual specificity phosphatase 4	4.7
	411852	AA528140	Hs.107515	ESTs, Weakly similar to T00329 hypotheti	4.7
	450166	AA429504		ESTs	4.7
	438456	AA913381	Hs.20594	ESTs	4.7
	446839	BE091826	Hs.16244	mitotic spindle coiled-coil related prot	4.7
80	438527	AJ969251	Hs.115325	RAB7, member RAS oncogene family-like 1	4.7
	458946	AA009716	Hs.42311	ESTs	4.7
	454860	AW835767		gb:QV4-LT0016-240200-110-b08 LT0016 Homo	4.7
	424736	AF230877	Hs.152701	microtubule-interacting protein that ass	4.7
	443426	AF098158	Hs.9329	chromosome 20 open reading frame 1	4.6

	422648	D66983	Hs.118893	Melanoma associated gene	4.6
	431319	AA873350	Hs.302232	ESTs	4.6
	445666	R59960	Hs.282386	ESTs	4.6
	416406	D85961	Hs.79299	Epoma HMGIC fusion partner-like 2	4.6
5	422887	AJ751848	Hs.49215	ESTs	4.6
	422938	NM_001809	Hs.1594	centromere protein A (17kD)	4.6
	405141	Y14443		zinc finger protein 200	4.6
	440210	AW874562	Hs.125296	ESTs	4.6
10	432527	AW975028	Hs.102754	ESTs	4.6
	439726	AW448993	Hs.293707	ESTs, Weakly similar to I38598 zinc fing	4.6
	435143	R12375	Hs.194600	ESTs	4.6
	422170	AJ791949	Hs.112432	anti-Müllerian hormone	4.6
	452874	AK001061	Hs.30925	hypothetical protein FLJ10199	4.6
	408996	AJ979168	Hs.344096	glycoprotein (transmembrane) nmb	4.6
15	412568	AJ878826	Hs.74034	caveolin 1, caveolae protein, 22kD	4.5
	426215	AW963419	Hs.155223	stanniocalcin 2	4.5
	413076	U10564	Hs.75188	wee1 (S. pombe) homolog	4.5
	456759	BE259150	Hs.127792	delta (Drosophila)-like 3	4.5
20	419735	AW750056	Hs.169577	Homo sapiens cDNA FLJ14743 fs, clone NT	4.5
	433675	AW977653	Hs.75319	ribonucleotide reductase M2 polypeptide	4.5
	441217	AJ922183	Hs.213246	ESTs	4.5
	435542	AA687376		ESTs	4.5
	440435	AL042201	Hs.21273	transcription factor NYD-sp10	4.5
25	400288	X06256	Hs.149609	Integrin, alpha 5 (fibronectin receptor,	4.5
	418114	AJ695549	Hs.183868	glucuronidase, beta	4.5
	437323	AA371145	Hs.194397	leptin receptor	4.5
	425139	AW630488	Hs.25338	protease, serine, 23	4.5
	423678	AW963357	Hs.7847	ESTs	4.5
30	403961			Target Exon	4.5
	443462	AJ064690	Hs.171176	ESTs	4.5
	418483	W26076	Hs.221847	ESTs	4.5
	428873	AJ701609	Hs.98908	ESTs	4.5
	410268	AA316181	Hs.61635	sbx transmembrane epithelial antigen of	4.5
35	408298	AJ745325	Hs.271923	Homo sapiens cDNA: FLJ22785 fs, clone K	4.5
	449145	AJ632122	Hs.198408	ESTs	4.4
	439574	AJ469788	Hs.165190	ESTs	4.4
	423905	AW579960	Hs.135150	lung type-I cell membrane-associated gly	4.4
	453387	AJ990741	Hs.252809	ESTs	4.4
40	447444	AK000318	Hs.18616	hypothetical protein FLJ20311	4.4
	433507	AJ817336	Hs.191791	ESTs	4.4
	448048	BE281291	Hs.170408	ESTs, Moderately similar to A47582 B-cel	4.4
	421064	AJ245432	Hs.101382	tumor necrosis factor, alpha-induced pro	4.4
	402604			Target Exon	4.4
45	446291	BE397753	Hs.14623	interferon, gamma-inducible protein 30	4.4
	424503	NM_002205	Hs.149609	Integrin, alpha 5 (fibronectin receptor,	4.4
	423600	AJ633559	Hs.310359	ESTs	4.4
	403361			NM_002210*:Homo sapiens Integrin, alpha	4.4
	408432	AW195262		gb:rn67b05.x1 NCI_CGAP_CML1 Homo sapiens	4.4
50	424489	T48851	Hs.274470	D-siglec precursor,	4.3
	442264	AJ278777	Hs.263455	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.3
	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13090 fs, clone NT	4.3
	417018	M16038	Hs.80887	v-yes-1 Yamaguchi sarcoma viral related	4.3
	414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	4.3
55	439566	AF086387		gb:Homo sapiens full length insert cDNA	4.3
	425242	D13635	Hs.155287	KIAA0010 gene product	4.3
	423529	T87318	Hs.120411	ESTs	4.3
	439538	AA837323	Hs.56407	ESTs	4.3
	453682	T79703		gb:yd71e08.r1 Soares fetal liver spleen	4.3
60	425259	AL049280	Hs.155397	Homo sapiens mRNA: cDNA DKFZp564K143 (fr	4.3
	417918	AA209205	Hs.163754	hypothetical protein FLJ12606	4.3
	426649	AJ914936	Hs.97152	ESTs	4.3
	438875	AA827640	Hs.189059	ESTs	4.3
	445868	BE169357	Hs.207428	ESTs	4.3
65	426509	M31166	Hs.2050	pentadn-related gene, rapidly induced b	4.3
	409893	AW247090	Hs.57101	minichromosome maintenance deficient (S.	4.3
	432058	AW665996	Hs.130729	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.3
	430694	AA810624	Hs.30936	ESTs, Weakly similar to H2BH_HUMAN HISTO	4.3
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALUF_HUMAN IIII	4.2
70	443950	NM_001425	Hs.9999	epithelial membrane protein 3	4.2
	419896	Z99362		gb:HS299362 DKFZphamy1 Homo sapiens cDNA	4.2
	452994	AW962597	Hs.31305	KIAA1547 protein	4.2
	420841	AJ625251	Hs.94037	hypothetical protein FLJ23053	4.2
	441255	R06350	Hs.171635	ESTs	4.2
75	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fs, clone PL	4.2
	411789	AF245505	Hs.72157	Adican	4.2
	409638	AW450420	Hs.21335	ESTs	4.2
	439192	AW970536	Hs.105413	ESTs	4.2
	440684	AJ253123	Hs.127356	ESTs, Highly similar to S21424 nestin [H	4.2
80	437470	AL390147	Hs.134742	hypothetical protein DKFZp547D065	4.2
	432343	NM_002960	Hs.2961	S100 calcium-binding protein A3	4.2
	401454			NM_014226*:Homo sapiens renal tumor anti	4.2
	431770	BE221880	Hs.268555	5'-3' exonuclease 2	4.2
	442326	H92962	Hs.124813	hypothetical protein MGC14817	4.2

	419402	Z68155	Hs.90291	laminin, beta 2 (laminin S)	4.2
	435703	AW630133	Hs.83313	GK003 protein	4.2
	444609	AW571659	Hs.278081	ESTs	4.2
	404407			Target Exon	4.2
5	450581	AF081513	Hs.25195	TGF-beta 4	4.2
	407838	BE146411	Hs.40342	putative nuclear protein	4.1
	410407	X65839	Hs.63287	carbonic anhydrase IX	4.1
	418883	BE387036	Hs.1211	acid phosphatase 5, tartrate resistant	4.1
	438898	AI819863	Hs.106243	ESTs	4.1
10	421674	T10707	Hs.295355	hypothetical protein FLJ23138	4.1
	445921	AW015211	Hs.146181	ESTs	4.1
	453055	AW291438	Hs.31917	Homo sapiens, clone MGC-9658, mRNA, comp	4.1
	413450	Z99716	Hs.75372	N-acetylgalactosaminidase, alpha-	4.1
	427463	AA442224	Hs.97900	ESTs	4.1
15	450639	AI703186	Hs.277174	ESTs	4.1
	417576	AA339449	Hs.82285	phosphoribosylglycinamide formyltransferase	4.1
	437269	AA334384	Hs.149420	ESTs	4.1
	415688	AA166963		gb:z66d01.s1 Stratagene ovarian cancer	4.1
	414300	AI304870	Hs.188680	ESTs	4.1
20	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	4.1
	415024	AI983981	Hs.189114	ESTs	4.1
	408102	U46351	Hs.621	lectin, galactoside-binding, soluble, 3	4.1
	448019	AW947164	Hs.195641	ESTs, Moderately similar to I38022 hypot	4.1
	451433	AA021140	Hs.269265	ESTs, Weakly similar to A46010 X-linked	4.1
25	446523	NM_003063	Hs.334629	sarcosin	4.1
	427700	AA262294	Hs.180383	dual specificity phosphatase 6	4.1
	402239			Target Exon	4.1
	423713	AW764182		gb:RC2-CT0321-131199-011-c01 CT0321 Homo	4.1
30	437814	AI088192	Hs.135474	ESTs, Weakly similar to DDX9_HUMAN ATP-D	4.1
	414948	C15240	Hs.182155	ESTs	4.0
	421307	BE539976	Hs.103305	Homo sapiens mRNA; cDNA DKFZp434B0425 (f	4.0
	427375	AL035460	Hs.177536	metallocarboxypeptidase CPX-1	4.0
	450297	AW901347	Hs.38592	hypothetical protein FLJ23342	4.0
35	446555	AI021987	Hs.59970	ESTs	4.0
	439978	BE139460	Hs.124673	Homo sapiens cDNA FLJ11477 fis, clone HE	4.0
	432842	AW674093	Hs.334822	hypothetical protein MGC4485	4.0
	422282	AF019225	Hs.114309	apolipoprotein L	4.0
	452574	AF127481	Hs.301946	lymphoid blast crisis oncogene	4.0
40	449256	AA059050	Hs.59847	ESTs	4.0
	453385	AW296101	Hs.252806	ESTs	4.0
	443715	AI583187	Hs.9700	cyclin E1	4.0
	451778	AI828131	Hs.62954	ESTs, Weakly similar to zinc finger prot	4.0
	441287	AW293132	Hs.131373	ESTs	4.0
45	418661	NM_001949	Hs.1189	E2F transcription factor 3	4.0
	420894	AA744597	Hs.88854	ESTs	4.0
	454120	AB032990	Hs.40719	hypothetical protein KIAA1164	4.0
	441627	AA947552	Hs.58086	branched chain aminotransferase 1, cytos	4.0
	453948	AI970797	Hs.64859	ESTs	4.0
50	444170	AW813879	Hs.102408	ESTs	4.0
	427221	L15409	Hs.174007	von Hippel-Lindau syndrome	4.0
	418821	AA436002	Hs.183161	ESTs	4.0
	418216	AA662240	Hs.283099	AF15q14 protein	4.0
	435106	AA100847	Hs.5978	ESTs, Highly similar to AF174600 1 F-box	4.0
55	430890	X54232	Hs.2699	glypican 1	3.9
	429490	AI971131	Hs.23889	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.9
	425292	NM_005824	Hs.155545	37 kDa leucine-rich repeat (LRR) protein	3.9
	436265	AA731331	Hs.190668	ESTs	3.9
	407304	AA565832	Hs.271649	gb:nj32b03.s1 NCI_CGAP_AA1 Homo sapiens	3.9
60	433244	AB040943	Hs.271285	KIAA1510 protein	3.9
	446960	AW294936	Hs.156762	ESTs	3.9
	406627	T64904	Hs.163780	ESTs	3.9
	420552	AK000492	Hs.98806	hypothetical protein	3.9
	402082			C18000743:gi5678363[ref]NP_033416.1[1	3.9
65	419594	AA013051	Hs.91417	topoisomerase (DNA) II binding protein	3.9
	448966	AW372914	Hs.88149	phosphoinositide 3-phosphate-binding prot	3.9
	427527	AI809057	Hs.293441	immunoglobulin heavy constant mu	3.9
	422564	AI148006	Hs.222120	ESTs	3.9
	418781	T41160	Hs.8404	ESTs	3.9
70	431820	AW410408	Hs.271167	L-pipecolic acid oxidase	3.9
	413095	AA494359	Hs.30715	potassium voltage-gated channel, Isk-rel	3.9
	430637	BE160081	Hs.256290	S100 calcium-binding protein A11 (calgiz	3.9
	443539	AI076182	Hs.134074	ESTs, Moderately similar to ALU8_HUMAN A	3.9
	422173	BE385828	Hs.250619	phorbol-like protein MDS019	3.9
75	433388	AI432672	Hs.288539	hypothetical protein FLJ22191	3.8
	403849			Target Exon	3.8
	406648	M33600	Hs.308026	major histocompatibility complex, class	3.8
	445075	AI651827	Hs.344767	ESTs	3.8
	420004	AW975532	Hs.164039	ESTs, Moderately similar to I38022 hypot	3.8
80	449670	F07693	Hs.85603	Homo sapiens mRNA; cDNA DKFZp434K2172 (f	3.8
	424479	AF064238	Hs.149098	smoothelin	3.8
	449625	NM_014253		odt (odd Oz/ten-m, Drosophila) homolog 1	3.8
	418641	BE243136	Hs.86947	a disintegrin and metalloproteinase doma	3.8
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	3.8

5	427286	AW732802	Hs.2132	epidermal growth factor receptor pathway	3.8
	453920	A1133148	Hs.36602	I factor (complement)	3.8
	453857	AL080235	Hs.35861	DNFZP586E1621 protein	3.8
	406872	A1760903		gb:W09h08.x1 NCI_CGAP_CLL1 Homo sapiens	3.8
	403696			C4001100:gi5852342gb AAD54015.1  (AF0	3.8
10	417791	AW965339	Hs.111471	ESTs	3.8
	418036	Z37976	Hs.83337	latent transforming growth factor beta b	3.8
	404209			Target Exon	3.8
	431454	AW975980	Hs.292918	ESTs	3.8
	410422	AL042014	Hs.63348	Homo sapiens, clone MGC:15203, mRNA, com	3.8
15	406739	A1566709	Hs.182426	ribosomal protein S2	3.8
	450810	BE207588	Hs.334360	transforming growth factor beta 1 induce	3.8
	457876	A1821940		ESTs, Moderately similar to ALU8_HUMAN A	3.8
	435718	R06569	Hs.269534	ESTs	3.8
	429716	R25685	Hs.211933	collagen, type XIII, alpha 1	3.8
20	442710	A1015631	Hs.23210	ESTs	3.8
	456534	X91195	Hs.100623	phospholipase C, beta 3, neighbor pseudo	3.8
	419764	BE262524	Hs.93183	vasodilator-stimulated phosphoprotein	3.8
	436674	AA725002	Hs.272018	low molecular mass ubiquitinone-binding pr	3.8
	408896	A1810447	Hs.48778	niban protein	3.8
25	425300	AW601773	Hs.270259	ESTs	3.8
	432886	BE159028	Hs.279704	chromatin accessibility complex 1	3.8
	424090	X99699	Hs.139262	XIAP associated factor-1	3.7
	420202	AL036557	Hs.95910	putative lymphocyte G0/G1 switch gene	3.7
	427584	BE410293	Hs.179718	v-myb avian myeloblastosis viral oncogen	3.7
30	420579	AA278449	Hs.137429	ESTs	3.7
	405038	Y14443		zinc finger protein 200	3.7
	412590	AL134388	Hs.135033	ESTs, Weakly similar to I38022 hypotheti	3.7
	406714	A1219304	Hs.266959	hemoglobin, gamma G	3.7
	412014	A1620650	Hs.43761	ESTs, Weakly similar to A46010 X-linked	3.7
35	419713	AW968058	Hs.92381	nudix (nucleoside diphosphate linked moi	3.7
	449115	AW959952	Hs.37528	ESTs, Weakly similar to AF090944 1 PRO06	3.7
	408955	BE315170	Hs.8087	Target CAT	3.7
	441362	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E coli Re	3.7
	413774	AA131782	Hs.182314	ESTs	3.7
40	440225	BE295782	Hs.159	tumor necrosis factor receptor superfam	3.7
	414528	AA148950	Hs.188836	ESTs	3.7
	436137	A1056769	Hs.133512	ESTs	3.7
	414733	BE514535	Hs.77171	minichromosome maintenance deficient (S.	3.7
	406785	AA588061		gb:z10d03.s1 NCI_CGAP_Co2 Homo sapiens	3.7
45	443381	A1792628	Hs.133273	ESTs	3.7
	434868	R50032	Hs.159263	collagen, type VI, alpha 2	3.7
	409557	BE182896	Hs.211193	ESTs	3.7
	420300	AA258245	Hs.127573	Homo sapiens FKSG41 (FKSG41) mRNA, compl	3.7
	427695	R88483	Hs.172862	ESTs	3.7
50	407756	AA116021	Hs.38260	ubiquitin specific protease 18	3.6
	437916	BE566249	Hs.20999	hypothetical protein FLJ23142	3.6
	434563	AW083994	Hs.9469	pleckstrin homology domain-containing, f	3.6
	444371	BE540274	Hs.239	forkhead box M1	3.6
	437816	A1823445	Hs.280699	ESTs	3.6
55	405605			C2001342:gi127814 sp P26434 NAH4_RAT SO	3.6
	444794	AA19991	Hs.145225	ESTs	3.6
	430540	AW245422	Hs.106357	Homo sapiens cDNA: FLJ22105 fis, clone H	3.6
	429747	M87507	Hs.2490	caspase 1, apoptosis-related cysteine pr	3.6
	453785	A1368236	Hs.283732	ESTs, Moderately similar to ALU1_HUMAN A	3.6
60	403267			Target Exon	3.6
	440370	AA884000	Hs.8173	hypothetical protein FLJ10803	3.6
	447497	AW167254	Hs.205722	ESTs	3.6
	428600	AW863261	Hs.242413	hypothetical protein DKFZp434K1421	3.6
	428715	AW283716	Hs.53126	ESTs	3.6
65	416097	BE387371	Hs.118964	hypothetical protein FLJ20085	3.6
	453438	A1469935	Hs.22792	ESTs	3.6
	427299	AA830210	Hs.214263	ESTs, Moderately similar to ALU1_HUMAN A	3.6
	434577	R37316	Hs.179769	Homo sapiens cDNA: FLJ22487 fis, clone H	3.6
	452785	AL359942	Hs.296434	erythroid differentiation and denucleat	3.6
70	434467	BE552368	Hs.231853	Homo sapiens cDNA FLJ13445 fis, clone PL	3.6
	435523	T62849	Hs.11090	membrane-spanning 4-domains, subfamily A	3.6
	418287	A1872319	Hs.78935	methionine aminopeptidase; eIF-2-associ	3.6
	422156	N34524		gb:yy56d10.s1 Soares_multiple_sclerosis_	3.6
	441224	AU076964	Hs.7753	calumenin	3.6
75	458072	A1890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fis, clone K	3.6
	435677	AA694142	Hs.293726	ESTs, Weakly similar to TSGA RAT TESTIS	3.6
	433325	AW206986	Hs.143905	ESTs	3.6
	420683	AA830168	Hs.271305	ESTs	3.6
	443206	AB011420	Hs.9075	serine/threonine kinase 17a (apoptosis-i	3.6
80	454078	AA601518	Hs.22209	secreted modular calcium-binding protein	3.6
	404584			Target Exon	3.5
	428311	NM_005651	Hs.183671	tryptophan 2,3-dioxygenase	3.5
	425922	AL157466	Hs.162751	Homo sapiens mRNA; cDNA DKFZp761E2423 (I	3.5
	415131	D61119		gb:HUM158C11B Clontech human fetal brain	3.5
	412971	AA889628	Hs.35125	ESTs	3.5
	451593	AF151879	Hs.26706	CGI-121 protein	3.5
	416427	BE244050	Hs.79307	Rac/Cdc42 guanine exchange factor (GEF)	3.5



	427809	M26380	Hs.180878	lipoprotein lipase	3.5
	443303	U67319	Hs.9216	caspase 7, apoptosis-related cysteine pr	3.5
	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	3.5
5	445936	BE543594	Hs.61478	hypothetical protein FLJ22329	3.5
	411537	BE073250		gb:MR0-BT0551-060300-102-e05 BT0551 Homo	3.5
	432250	AA452088	Hs.274170	Opa-interacting protein 2	3.5
	458438	AI141520	Hs.151464	ESTs, Weakly similar to ALUC_HUMAN [!!!]	3.5
	407253	AA111175	Hs.141939	ESTs, Moderately similar to S65657 alpha	3.5
10	410507	AA355288	Hs.76064	transitional epithelia response protein	3.5
	412436	AA665089		gb:mu76d01.s1 NCJ_CGAP_Alv1 Homo sapiens	3.5
	416933	BE561850	Hs.80506	small nuclear ribonucleoprotein polypept	3.5
	437681	AJ207958	Hs.166556	Homo sapiens, Similar to TEA domain fam	3.5
	408247	AA053451	Hs.225632	leucine zipper protein 3	3.5
	440074	AA663045	Hs.10669	ESTs, Weakly similar to T00050 hypotheti	3.5
15	422448	AW372922	Hs.116774	Integrin, alpha 1	3.5
	420676	AJ434780	Hs.4248	vav 2 oncogene	3.5
	417663	R07483	Hs.180451	ESTs	3.5
	451089	AA903705	Hs.4190	Homo sapiens cDNA: FLJ23269 fs, clone C	3.5
	451446	AJ826288	Hs.171637	hypothetical protein MGC2628	3.5
20	414727	BE466904	Hs.190162	gb:hz26103.x1 NCJ_CGAP_GC8 Homo sapiens	3.5
	421778	AA428000	Hs.283072	actin related protein 2/3 complex, subun	3.5
	427413	BE547647	Hs.177781	hypothetical protein MGC5618	3.5
	414039	M83221	Hs.858	v-rel avian reticuloendotheliosis viral	3.5
25	458304	AJ820973		gb:nc21c02.y5 NCJ_CGAP_Pr1 Homo sapiens	3.5
	449162	AJ532740	Hs.10476	ESTs	3.5
	437774	AW978199	Hs.291648	ESTs, Weakly similar to I38022 hypotheti	3.5
	426827	AW067805	Hs.172665	methyltetrahydrofolate dehydrogenase	3.5
	452203	X57522		transporter 1, ATP-binding cassette, sub	3.4
30	450325	AJ935962	Hs.26289	ESTs	3.4
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	3.4
	418726	U50330	Hs.1274	bone morphogenetic protein 1	3.4
	417409	BE272506	Hs.82109	syndecan 1	3.4
	412811	H06382		ESTs	3.4
35	430758	T91568	Hs.270618	ESTs, Moderately similar to A34087 hypot	3.4
	425769	U72513	Hs.159488	Human RPL13-2 pseudogene mRNA, complete	3.4
	452682	AA456193	Hs.9071	progesterone membrane binding protein	3.4
	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotactin)	3.4
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	3.4
40	443378	AW392550	Hs.9280	proteasome (prosome, macropain) subunit,	3.4
	446134	AW161234	Hs.13993	TBP-like 1	3.4
	418669	U85992	Hs.87197	Human clone IMAGE:35527 unknown protein	3.4
	425006	R38685	Hs.222746	ESTs	3.4
	435256	AF193766	Hs.13872	cytokine-like protein C17	3.4
45	453379	AA035261	Hs.61753	ESTs	3.4
	448224	R48700	Hs.20733	Homo sapiens cDNA: FLJ22356 fs, clone H	3.4
	455899	BE155112		gb:PM1-HT0350-151299-003-a03 HT0350 Homo	3.4
	422017	NM_003877	Hs.110776	STAT induced STAT inhibitor-2	3.4
	417395	BE564245	Hs.82084	integrin beta 3 binding protein (beta3-e	3.4
50	405046			C3000978:gi 9280045 kb BAB01579.1  (AB0	3.4
	423178	AJ033140	Hs.124983	Homo sapiens mRNA: cDNA DKFZp564C142 (tr	3.4
	455142	AW861840		gb:CM0-CT0337-250200-243-g01 CT0337 Homo	3.4
	418819	AA228776	Hs.191721	ESTs	3.4
	428289	M26301	Hs.2253	complement component 2	3.4
55	412799	AJ267606		gb:aq91h03.x1 Stanley Frontal S8 pool 1	3.4
	403108			ENSP00000241415:Hypothetical 67.7 kDa p	3.4
	421637	AF035290	Hs.106300	Homo sapiens clone Z3556 mRNA sequence	3.4
	419373	NM_003244	Hs.90077	TG-interacting factor (TALE family homeo	3.4
	424408	AJ754813	Hs.146428	collagen, type V, alpha 1	3.4
60	451061	AW291487	Hs.213659	ESTs, Weakly similar to KIAA1357 protein	3.4
	433578	BE335886	Hs.3416	adipose differentiation-related protein	3.4
	439867	AA847510	Hs.161292	ESTs	3.4
	449249	T52285	Hs.193115	Homo sapiens mRNA for KIAA1764 protein,	3.4
	420882	AW576160	Hs.100729	KIAA0692 protein	3.4
65	440826	AW383618	Hs.346256	ESTs, Moderately similar to ALU2_HUMAN A	3.4
	427687	AW003867	Hs.1570	histamine receptor H1	3.4
	400533			ENSP00000209376:PRE065 protein (Fragmen	3.3
	436314	AJ983409	Hs.189226	ESTs	3.3
	418110	R43523	Hs.217754	hypothetical protein FLJ22202	3.3
	448140	AF146761	Hs.20450	BCM-like membrane protein precursor	3.3
70	402229	BE262604		mitochondrial ribosomal protein S2	3.3
	410697	U24389	Hs.65436	lysyl oxidase-like 1	3.3
	424614	X54468	Hs.151242	serine (or cysteine) proteinase inhibitor	3.3
	443338	R99575	Hs.302908	ESTs	3.3
75	433082	AK001757	Hs.281348	hypothetical protein FLJ10895	3.3
	405303			Target Exon	3.3
	410889	X91662	Hs.66744	twist (Drosophila) homolog (acrocephalos	3.3
	406673	M34996	Hs.198253	major histocompatibility complex, class	3.3
	431721	AB032996	Hs.268044	KIAA1170 protein	3.3
80	426746	J03626	Hs.2057	uridine monophosphate synthetase (orotat	3.3
	425262	D87119	Hs.155418	GS3955 protein	3.3
	424947	R77952		ESTs, Weakly similar to alternatively sp	3.3
	437634	AW293046	Hs.255158	ESTs	3.3
	437014	AA808757	Hs.222531	ESTs, Weakly similar to S59501 interfero	3.3

436456	418932	429415	NM_002593	Hs.202097	procollagen C-endopeptidase enh
408601	453496	422081	AW136820	Hs.196011	ESTs
420886	423169	435258	AW857491	Hs.107125	plasmalemma vesicle associated
437162	418049	410886	AW603324		gb:MR4-ST0121-141099-010-GO
445704	441243	442609	AL020996	Hs.8518	selenoprotein N
440700	444427	416188	BE157260	Hs.79070	v-myc avian myelocytomatosis vi
414747	449115	441544	AW300043	Hs.127137	ESTs
431553	446418	437860	AA333063	Hs.279898	Homo sapiens cDNA: FLJ23165
405605	437762	419652	AL157485	Hs.91973	hypothetical protein
431467	450336	443623	AA345519	Hs.9641	complement component 1, q sub
457561	433842	415198	AW009480	Hs.943	natural killer cell transcript 4
412507	444124	441701	AW339828	Hs.127497	ESTs
413448	423858	426384	AI472078	Hs.303662	hypothetical protein FLJ13189 (f
444168	454792	420886	AA805453		ESTs, Weakly similar to T29012
400090	412775	428896	AW291932	Hs.98936	ESTs
433642	429609	458253	AW296952	Hs.196802	ESTs
422938	413951	456895	AA354771	Hs.43047	Homo sapiens cDNA FLJ13585
426318	433324	434818	AA650097	Hs.5996	ESTs
428896	449092	424278	AK000723	Hs.144517	hypothetical protein FLJ20716
449277	422390	434131	AI858275	Hs.143659	ESTs
426509	424899	447111	AI017574	Hs.17409	cysteine-rich protein 1 (Intestini
412216	454253	443021	AA368546	Hs.8904	lg superfamily protein
428845	410126	416677	T83470	Hs.334840	ESTs, Moderately similar to I7E
431512	456508	429973	AI423317	Hs.164680	ESTs
418113	405303	422545	X02761	Hs.287820	fibronectin 1
450661	420871	444006	BE395085	Hs.10088	type I transmembrane protein I
448448	424331	420116	NM_013241	Hs.95231	FH1/FH2 domain-containing pr
422631	425768	401841			NM_015113:Homo sapiens Ki
419687	442320	414418	AW409985	Hs.76084	hypothetical protein MGC2721
450963	407371	431019	NM_005249	Hs.2714	forkhead box G1B
435060	439764	453707	AW003879	Hs.126522	Homo sapiens, clone MGC:16
440274	410421	432188	AI362952	Hs.2928	solute carrier family 7 (cationic
437438	422154	407378	AA299264	Hs.57776	ESTs, Moderately similar to I3
435401	451485	430701	AI760833	Hs.293971	ESTs
416737	457354	429569	AA549993	Hs.138343	ESTs, Weakly similar to I788E
445314	407721	458918	H56499	Hs.252692	ESTs, Weakly similar to I3802
425870	452371	439764	T26535	Hs.22744	hypothetical protein MGC1311
425294	459664	452221	C21322	Hs.288057	hypothetical protein FLJ2224:
416404	437081	403969			ENSP00000034663:Zinc fing
413999	419851	427359	AW020782	Hs.79881	Homo sapiens cDNA: FLJ231
422798	440081	414396	BE548266	Hs.76057	galactose-4-epimerase, UDP
426384	449711	444153	AK001610	Hs.10414	hypothetical protein FLJ1074
430147	450401	414403	AW969551	Hs.76064	ribosomal protein L27a
425269	423116	444168	AW379879		gb:RC1-HT0256-081199-011
406911	449961	410595	AW629223	Hs.64794	zinc finger protein 183 (RINC
425261	454031	444881	AI623288	Hs.192805	ESTs
401554	419861	440381	AA917808	Hs.190495	ESTs
439341	423421	416207	NM_014745	Hs.79077	Homo sapiens, clone MGC:1
414861	420351	439130	AA306090	Hs.124707	ESTs
453971	424841	457579	AB030816	Hs.36761	HRAS-like suppressor
404281	453541	406736	AI254733	Hs.182426	ribosomal protein S2
432891	447871	420172	AA501122	Hs.95655	secreted and transmembran
451491	419581	444143	AW747996	Hs.249483	ESTs
442571	451021	449428	T92251	Hs.180999	ESTs, Moderately similar to
428361	422701	458760	AI498631	Hs.50842	interferon-induced protein 3
443751	432801	450811	AI739486	Hs.198882	ESTs
417861	446591	425331	AW962128	Hs.111334	fertilin, light polypeptide
443891	457721	445211	BE045601	Hs.245497	ESTs
438861	403791	441318	AI078234	Hs.118248	gb:EST374201 MAGE reser
453901	445411	450825	AW970107	Hs.176130	ESTs, Weakly similar to YC
447711	438701	437640	AA764893	Hs.272155	ESTs
426581	434571	444672	Z95636	Hs.11669	gb:EST382188 MAGE reser
421121	422771	407047	X65965		ESTs, Weakly similar to I3
410761	433431	413834	BE298896	Hs.224179	gb:H.sapiens SOD-2 gene
431461	427961	439755	AW748482	Hs.77873	B7 homolog 3
452221	414431	435520	AA297990	Hs.9315	HNOEL-iso protein
412321	420551	414598	AI094221	Hs.135150	lung type-I cell membrane
428601	456201	440948	AW188311	Hs.128619	ESTs
426501	418811	412851	AI826502	Hs.106149	ESTs
405551	438941	417336	R70429	Hs.81988	disabled (Drosophila) hon
421481	439081	417944	AU077196	Hs.82985	collagen, type V, alpha 2
448561	451731	411671	BE049094		ESTs
452101	415251	430444	AW296421	Hs.121035	ESTs
429541	442781	425843	BE313280	Hs.159627	death associated protein
450711	432671	407721	Y12735	Hs.38018	dual-specificity tyrosine-(
429311	435091	439093	AA534163	Hs.5476	Homo sapiens, clone IM/
437411	439031	449523	NM_000579	Hs.54443	chemokine (C-C motif) re
432111	450331	435664	AI032087	Hs.269819	ESTs
404611	400831	453085	AW954243		KIAA0251 protein
452611	400831	430314	AA369601	Hs.239138	pre-B-cell colony-enhanc
421411	417631	447627	AI702896	Hs.42091	ESTs
419011	425791				
453511	415311				

5	415114	D60468	Hs.94181	ESTs	6.0	6.0
	448958	AB020651	Hs.22653	KIAA0844 protein	5.9	5.9
	431467	N71831	Hs.256398	Homo sapiens mRNA; cDNA DKFZp434E0528 (f	5.9	6.0
	447138	AI439112	Hs.93828	ESTs, Weakly similar to 2109260A B cell	5.8	5.8
	414545	AA149287	Hs.76605	ESTs	5.8	3.6
	418202	N48521	Hs.26549	KIAA1708 protein	5.8	5.8
	410389	AW954049	Hs.8177	ESTs, Weakly similar to PIHUB6 salivary	5.7	9.6
	444124	R43097	Hs.6818	ESTs	5.7	9.3
10	408065	AW954272		gb:EST366342 MAGE resequences, MAGC Homo	5.6	5.6
	448533	AL119710	Hs.21365	nucleosome assembly protein 1-like 3	5.6	9.6
	425523	AB007948	Hs.158244	KIAA0479 protein	5.6	35.0
	459697	AA06062	Hs.98002	ESTs	5.6	5.4
	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	5.6	5.6
15	420111	AA255652		gb:zs21h11.1 NCI_CGAP_GC81 Homo sapiens	5.5	3.2
	450149	AW969781	Hs.132863	Zic family member 2 (odd-paired Drosophi	5.4	5.4
	424918	R13982	Hs.169309	myelin-associated oligodendrocyte basic	5.3	5.3
	438202	AW169287	Hs.22588	ESTs	5.3	5.3
	448605	AL109678	Hs.21597	Homo sapiens mRNA full length insert cDN	5.3	5.3
20	425580	L11144	Hs.1907	galanin	5.3	3.5
	418868	T65754		gb:yc11c07.s1 Stratagene lung (937210) H	5.3	3.8
	430091	AB032958	Hs.233023	KIAA1132 protein	5.3	4.9
	448786	BE048842	Hs.179075	Homo sapiens cDNA FLJ11881 fs, clone HE	5.2	5.2
	427283	AL119796	Hs.174185	ectonucleotide pyrophosphatase/phosphodi	5.2	3.0
25	415666	H72893		gb:yu03c11.1 Soares fetal liver spleen	5.2	5.2
	410240	AL157424	Hs.61289	synaptotagmin 2	5.2	4.6
	428784	Y12851	Hs.193470	purinergic receptor P2X, ligand-gated io	5.2	7.7
	446692	Z44514		Homo sapiens mRNA for KIAA1763 protein,	5.2	33.0
	428508	BE252383	Hs.184668	SBB131 protein	5.2	4.1
30	446353	AI290919	Hs.153661	ESTs	5.1	5.1
	423135	N67655	Hs.26411	ESTs	5.1	8.2
	437331	AL353933	Hs.21710	hypothetical protein DKFZp761G0313	5.1	5.1
	413388	M81883	Hs.324784	glutamate decarboxylase 1 (brain, 67kD)	5.1	5.1
	429859	NM_007050	Hs.225952	protein tyrosine phosphatase, receptor t	5.1	5.1
35	411379	AI816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	5.0	11.2
	408068	AW148652	Hs.167398	ESTs	5.0	5.0
	415734	NM_014747	Hs.78748	KIAA0237 gene product	5.0	27.4
	439607	BE540565	Hs.159460	ESTs	5.0	5.6
	425984	AW836277	Hs.165636	hypothetical protein DKFZp761C07121	4.9	29.3
40	414631	AW970130	Hs.65406	ESTs	4.9	4.9
	437117	AL049256	Hs.122593	ESTs	4.9	3.8
	418527	AA450386	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	4.9	4.9
	425073	W39609	Hs.22003	solute carrier family 6 (neurotransmitte	4.9	4.9
	455384	H72176	Hs.4273	hypothetical protein FLJ13159	4.9	4.9
45	443150	AI034467	Hs.34650	ESTs	4.9	7.6
	422411	AW749443	Hs.22511	ESTs	4.9	12.0
	414931	AK000342	Hs.77648	Homo sapiens mRNA; cDNA DKFZp761M0223 (f	4.9	3.4
	430456	AA314998	Hs.241503	hypothetical protein	4.8	4.7
	428186	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	4.8	3.9
50	433516	AA595802	Hs.33410	ESTs, Weakly similar to T17279 hypotheti	4.8	4.8
	427287	NM_014903	Hs.174188	KIAA0938 protein	4.8	4.8
	416101	R24854	Hs.268806	ESTs	4.8	3.3
	447252	R90916	Hs.12449	Homo sapiens transmembrane protein HTMP1	4.8	3.2
	458268	AA428403	Hs.106131	ESTs	4.7	3.9
55	440105	AA694010	Hs.6932	Homo sapiens clone 23809 mRNA sequence	4.7	8.2
	445102	AW204610	Hs.22270	ESTs	4.7	19.2
	419643	F08068	Hs.91791	chromosome 11 open reading frame 25	4.7	4.7
	414949	C15314	Hs.323349	ESTs	4.7	3.8
	453534	NM_014796	Hs.33187	KIAA0748 gene product	4.7	4.7
60	445729	H21058	Hs.13223	Homo sapiens mRNA full length insert cDN	4.7	4.0
	451032	W03692	Hs.323079	Homo sapiens mRNA; cDNA DKFZp564P116 (fr	4.7	4.9
	434792	AA649253	Hs.132458	ESTs	4.7	3.8
	447104	R19085	Hs.210706	Homo sapiens cDNA FLJ13182 fs, clone NT	4.7	3.0
	430537	XG2692	Hs.2593	phosphodiesterase 6B, cGMP-specific, rod	4.6	4.6
65	453431	AF094754	Hs.32973	glycine receptor, beta	4.6	4.6
	453302	NM_000838	Hs.32945	glutamate receptor, metabotropic 1	4.6	4.6
	429876	AB028977	Hs.225974	KIAA1054 protein	4.6	16.8
	451516	AI800515	Hs.12024	ESTs	4.6	6.3
	433670	AA604405		gb:nc087h09.s1 NCI_CGAP_AA1 Homo sapiens	4.6	3.9
70	437380	AL359577	Hs.112198	Homo sapiens mRNA; cDNA DKFZp547M073 (fr	4.5	3.8
	410368	AI267589	Hs.302689	hypothetical protein	4.5	10.4
	419191	U17195	Hs.89666	A kinase (PRK) anchor protein 6	4.5	4.5
	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	4.5	3.3
	424932	R14070	Hs.315369	Homo sapiens cDNA: FLJ23075 fs, clone L	4.5	10.2
75	432736	AA788898	Hs.179902	transporter-like protein	4.4	4.0
	421952	AA300900	Hs.58849	ESTs, Moderately similar to AF161511 1 H	4.4	3.2
	428963	AW382682	Hs.258208	Homo sapiens, clone MGC:15606, mRNA, com	4.3	3.3
	435040	A932350	Hs.152825	ESTs	4.3	4.7
	451301	AI769514	Hs.209890	EST	4.3	4.3
80	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.3	4.3
	410305	AF030409	Hs.62185	solute carrier family 9 (sodium/hydrogen	4.3	7.8
	433109	N58907	Hs.162430	EST	4.3	3.9
	431342	AW971018	Hs.21659	ESTs	4.3	8.0
	447163	AW292770	Hs.5542	DnaJ (Hsp40) homolog, subfamily C, membe	4.3	3.4

5	422414	AW875237	Hs.13701	ESTs	4.2	5.3
	439274	AF086092	Hs.48372	ESTs	4.2	18.3
	423589	AA328082	Hs.209569	ESTs	4.2	4.2
	429956	AJ374651	Hs.22542	ESTs	4.2	3.2
	427317	AB028955	Hs.175780	KIAA1032 protein	4.2	5.3
	426847	S78723	Hs.298623	5-hydroxytryptamine (serotonin) receptor	4.1	7.9
	408206	AF041853	Hs.43670	kinesin family member 3A	4.1	4.1
	433803	AJ823593	Hs.27688	ESTs	4.1	4.1
10	413024	AF036268	Hs.75149	SH3-domain GRB2-like 2	4.1	4.0
	448117	H49129	Hs.172882	ESTs	4.1	4.1
	450600	BE079478	Hs.24880	ESTs	4.1	3.9
	429550	AW293055	Hs.119357	ESTs	4.1	6.4
	448681	AL109781	Hs.21754	Homo sapiens mRNA full length insert cDN	4.0	7.2
15	458694	F12832	Hs.3610	ESTs	4.0	4.0
	452197	AW023595	Hs.232048	ESTs	4.0	4.0
	423728	AW891294	Hs.132138	solute carrier family 4, sodium bicarbon	4.0	7.9
	429656	X05608	Hs.211584	neurofilament, light polypeptide (58kD)	4.0	13.1
	448583	NM_015239	Hs.21542	KIAA1035 protein	4.0	4.0
20	419863	AW952691	Hs.93485	Homo sapiens mRNA; cDNA DKFZp761D191 (fr	3.9	21.4
	442412	R77677	Hs.346644	ESTs	3.9	3.9
	424001	W67883	Hs.137476	paternally expressed 10	3.9	5.4
	440293	AJ004193	Hs.22123	ESTs	3.9	3.9
	422890	Z43784		ankyrin 3, node of Ranvier (ankyrin G)	3.9	3.6
25	426054	U12431	Hs.166109	ELAV (embryonic lethal, abnormal vision,	3.9	3.9
	412949	AJ471639	Hs.71913	ESTs	3.8	3.7
	427457	AW779105	Hs.164682	ESTs	3.8	11.1
	416530	U62801	Hs.79361	kallikrein 6 (neurosin, zyme)	3.8	4.4
	442676	AJ733585	Hs.130897	ESTs	3.8	3.8
30	434998	AW975157	Hs.26037	ESTs	3.7	3.7
	424945	AJ221919		hypothetical protein FLJ10582	3.7	30.5
	415257	F03016	Hs.27513	ESTs	3.7	8.6
	407886	AW969688	Hs.100826	ESTs	3.7	20.2
	400844			NM_003105*:Homo sapiens sortilin-related	3.7	3.1
35	456765	AK97900	Hs.33067	ESTs	3.7	3.7
	430287	AW182459	Hs.125759	ESTs, Weakly similar to LEU5_HUMAN LEUKE	3.6	7.6
	452667	T87219	Hs.13219	ESTs	3.6	3.6
	436773	AW078629		PC4 and SFRS1 interacting protein 1	3.6	3.6
	424120	T80579	Hs.290270	ESTs	3.6	14.7
40	446574	AJ310135	Hs.335933	ESTs	3.6	3.5
	432453	AJ885537	Hs.27172	ESTs, Moderately similar to PC4259 ferri	3.6	3.9
	408119	W26213	Hs.101872	ESTs, Weakly similar to T00331 hypothe	3.6	3.6
	449093	AB035356	Hs.22998	neuroxin 1	3.6	3.6
	439239	AJ031540	Hs.235331	ESTs	3.6	49.5
45	451825	R56793	Hs.106576	alanine-glyoxylate aminotransferase 2-i	3.6	4.1
	435059	Z45270	Hs.235873	hypothetical protein FLJ22672	3.6	4.8
	423346	AJ267677	Hs.127416	synaptotagmin 1	3.6	20.1
	442738	AW002370	Hs.131055	ESTs, Weakly similar to NPM_HUMAN NUCLEO	3.5	3.5
	442106	AW205881	Hs.326728	ESTs	3.5	3.2
50	449117	AW449310	Hs.210262	ESTs, Weakly similar to HSS2_HUMAN HEPAR	3.5	3.5
	405819			NM_002578:Homo sapiens p21 (CDKN1A)-acti	3.5	13.5
	452311	AW304029	Hs.252744	ESTs	3.5	3.5
	448902	Z45998	Hs.22543	Homo sapiens mRNA; cDNA DKFZp76111912 (f	3.5	21.8
	410224	M55513	Hs.150208	potassium voltage-gated channel, shaker-	3.4	3.4
55	400098			Eos Control	3.4	3.4
	428001	H97428	Hs.219907	ESTs, Moderately similar to Transforming	3.4	5.9
	437268	AJ754847	Hs.227571	regulator of G-protein signalling 4	3.4	14.0
	443682	AJ383061	Hs.47248	ESTs, Highly similar to similar to Cdc14	3.4	3.3
	417417	F05745	Hs.89512	ATPase, Ca transporting, plasma membrane	3.3	17.1
60	418629	AB020695	Hs.91662	KIAA0688 protein	3.3	13.4
	419852	AW503756	Hs.286184	hypothetical protein dJ551D2.5	3.3	4.1
	417063	N50615	Hs.45061	ESTs	3.3	3.3
	435071	D60683	Hs.35495	ESTs	3.3	3.3
	446377	AW014022	Hs.170953	ESTs	3.3	3.3
65	412453	R20205	Hs.75236	ESTs	3.3	3.3
	450561	R49674	Hs.25909	ESTs	3.3	3.3
	423829	R44107	Hs.240905	ESTs	3.3	4.4
	415527	F11624		gb:HSC22D101 normalized infant brain cDN	3.3	3.3
	427386	AW836261	Hs.6727	ESTs	3.3	3.3
70	425121	AJ787511	Hs.154679	synaptotagmin I	3.2	3.9
	452856	AF034799	Hs.30881	protein tyrosine phosphatase, receptor t	3.2	10.7
	442879	AF032922	Hs.8813	synaptin binding protein 3	3.2	3.2
	417284	N62889	Hs.107242	Homo sapiens cDNA FLJ12985 fs, clone NT	3.2	3.2
	416805	F13271	Hs.79981	Human clone Z3560 mRNA sequence	3.2	6.7
75	429477	AJ275514	Hs.6658	ESTs	3.2	3.2
	453169	AB037815	Hs.32156	KIAA1394 protein	3.2	5.7
	408039	AA131424	Hs.336636	ESTs	3.2	3.2
	426269	H15302	Hs.168950	Homo sapiens mRNA; cDNA DKFZp566A1046 (f	3.2	22.1
	409746	NM_004794	Hs.66294	RAB33A, member RAS oncogene family	3.2	10.6
80	416874	H98752	Hs.42568	ESTs	3.2	6.0
	453919	AW959912	Hs.7076	KIAA1705 protein	3.2	3.2
	444861	R46789	Hs.76118	ubiquitin carboxyl-terminal esterase L1	3.2	3.2
	433315	R96754	Hs.239706	GRB2-associated binding protein 1	3.2	3.1
	419103	Z40229	Hs.98423	hypothetical protein FLJ23033	3.2	8.4

	424140	Z48051	Hs.141308	myelin oligodendrocyte glycoprotein	3.2	56.0
	421790	AW896201	Hs.22654	sodium channel, voltage-gated, type I, a	3.2	4.1
	432809	AA565509	Hs.131703	ESTs	3.1	9.9
5	445225	AI216555	Hs.202398	ESTs	3.1	5.5
	424087	N69333	Hs.143434	contactin 1	3.1	3.1
	437924	AI935344	Hs.164118	ESTs, Weakly similar to SL51_HUMAN SODIU	3.1	3.2
	419683	AA248897	Hs.48784	ESTs	3.1	5.9
	420173	AA256151	Hs.22999	ESTs	3.1	4.1
10	411666	AF106564	Hs.71345	neurofilament 3 (150kD medium)	3.1	6.8
	416220	N49776	Hs.170994	hypothetical protein MGC10946	3.1	4.5
	425138	H08849	Hs.167454	glutamate receptor, ionotropic, N-methyl	3.1	4.2
	422234	AF119818	Hs.113287	discs, large (Drosophila) homolog-associ	3.1	3.1
	445194	AI215667	Hs.175044	ESTs	3.1	3.1
15	438054	AA776626	Hs.169309	ESTs	3.1	10.2
	432149	AW614326	Hs.133483	ESTs, Weakly similar to T34549 probable	3.1	12.2
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	3.0	3.0
	414245	BE148072	Hs.75850	WAS protein family, member 1	3.0	11.7
	447673	AI823987	Hs.182285	ESTs	3.0	3.0
20	428392	H10233	Hs.2265	secretory granule, neuroendocrine protei	3.0	42.3
	418410	AA811441	Hs.107393	chromosome 3 open reading frame 4	3.0	3.9
	429024	AI652297	Hs.119302	complement-c1q tumor necrosis factor-rel	3.0	3.7
	426919	AL041228		ELAV (embryonic lethal, abnormal vision,	3.0	9.0
	424724	T06532	Hs.287709	Homo sapiens cDNA: FLJ22674 fs, clone H	3.0	3.0
25	410011	AB020641	Hs.57856	PFTAIR protein kinase 1	3.0	10.0
	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKFZp564N1662 (I	3.0	13.5
	426325	D28114	Hs.169309	myelin-associated oligodendrocyte basic	2.9	81.1
	429006	AA443143	Hs.50929	hypothetical protein FLJ13842	2.9	6.6
	410711	AB002316	Hs.65746	KIAA0318 protein	2.9	6.1
30	415486	H12214	Hs.13284	ESTs, Weakly similar to 2109260A B cell	2.9	15.7
	424474	AA308883	Hs.148680	catycon; D1 dopamine receptor-interactin	2.9	3.6
	448299	AA497044	Hs.20887	hypothetical protein FLJ10392	2.9	11.5
	419518	U78289	Hs.90798	Human clone 23695 mRNA sequence	2.9	3.6
	426529	AF090100	Hs.170241	Homo sapiens clone IMAGE 23915	2.9	5.1
35	430347	NM_002039	Hs.239706	GRB2-associated binding protein 1	2.9	3.2
	429401	AW296102	Hs.99272	ESTs, Weakly similar to S32567 A4 protei	2.9	6.1
	450154	R15891	Hs.281587	Human (clone CTG-A4) mRNA sequence	2.9	5.9
	434277	X77748	Hs.3786	glutamate receptor, metabotropic 3	2.8	28.5
	424790	AL119344	Hs.13326	ESTs, Weakly similar to 2004399A chromos	2.8	23.1
40	416836	D54745	Hs.80247	cholecystokinin	2.8	6.8
	449277	AA001064	Hs.43570	ESTs	2.8	8.5
	451952	AL120173	Hs.301663	ESTs	2.7	19.2
	408554	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	2.7	3.7
45	413408	RS1793	Hs.1440	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	2.7	3.0
	410343	AA084273	Hs.76561	ESTs, Weakly similar to S47072 finger pr	2.7	3.2
	420489	AA815089	Hs.193513	ESTs	2.7	4.1
	447359	NM_012093	Hs.18268	adenylate kinase 5	2.7	17.2
	423731	T08814		gb:EST06706 Infant Brain, Bento Soares H	2.7	4.0
50	409953	AA332277	Hs.57691	cadherin 18, type 2	2.7	5.5
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	2.7	11.5
	449714	AB033015	Hs.23941	KIAA1189 protein	2.7	7.5
	424922	BE386547	Hs.217112	hypothetical protein MGC10825	2.7	3.7
	432447	X92681	Hs.2998	contactin 2 (axonal)	2.7	4.1
	420071	AB028985	Hs.94806	ATP-binding cassette, sub-family A (ABC1	2.7	5.1
55	438068	AI927209	Hs.306210	Homo sapiens cDNA: FLJ23133 fs, clone L	2.6	5.1
	418512	AW498974		diacylglycerol kinase, zeta (104kD)	2.6	7.9
	447761	AF061573	Hs.19492	protocadherin 8	2.6	6.3
	448743	AB032962	Hs.21896	KIAA1136 protein	2.6	23.2
	408547	AA574291	Hs.57837	ESTs	2.6	4.0
60	426380	AI291267	Hs.149990	ESTs	2.6	6.9
	420898	AB002379	Hs.100113	KIAA0381 protein	2.6	3.7
	440357	AA379353	Hs.20950	phosphotyrosine phosphohistidine inorganic	2.6	3.7
	424572	M19650		Z,3'-cyclic nucleotide 3' phosphodiester	2.6	5.9
65	418338	NM_002522	Hs.84154	neuronal pentraxin I	2.5	6.1
	427658	H61387	Hs.30868	nogo receptor	2.5	3.0
	410359	R38624	Hs.106313	ESTs	2.5	6.3
	449717	AB040935	Hs.23954	cerebral cell adhesion molecule	2.5	4.5
	424458	M29273	Hs.1780	myelin associated glycoprotein	2.5	10.1
70	450133	AW969769	Hs.105201	ESTs	2.5	40.5
	428976	AL037824	Hs.194695	ras homolog gene family, member 1	2.5	17.4
	454293	H49739	Hs.134013	ESTs, Moderately similar to HK61_HUMAN H	2.5	9.5
	408447	AK002089	Hs.45080	Homo sapiens cDNA: FLJ11227 fs, clone PL	2.5	3.9
	414683	S78296	Hs.76888	hypothetical protein MGC12702	2.5	7.1
	422927	AW247388	Hs.301423	calcium binding protein 1 (calbrain)	2.5	3.0
75	449568	AL157479	Hs.23740	KIAA1598 protein	2.5	3.6
	454053	AW023006	Hs.27172	ESTs, Moderately similar to PC4259 ferri	2.5	3.6
	428495	NM_013279	Hs.184640	hypothetical protein MGC10781	2.5	3.2
	431098	AA324358	Hs.249227	Homo sapiens DNA, cosmid clones TN62 and	2.4	3.6
	452371	R40990	Hs.21658	ESTs	2.4	3.3
80	424997	AL138187	Hs.96920	ESTs	2.4	6.2
	450310	N62341	Hs.94116	ESTs	2.4	3.6
	452898	AA814497	Hs.78792	ESTs	2.4	3.9
	436734	AI937612	Hs.273758	hypothetical protein FLJ23112	2.4	4.7
	421931	NM_000814	Hs.1440	gamma-aminobutyric acid (GABA) A recepto	2.4	3.1

5	439428	AA835825	Hs.190490	ESTs	2.4	3.0
	445255	NM_014841	Hs.12477	synaptosomal-associated protein, 91 kDa	2.4	8.1
	436420	AA443966	Hs.31595	ESTs	2.4	3.7
	408822	AW500715	Hs.57079	Homo sapiens cDNA FLJ13267 fs, clone OV	2.4	3.0
	451407	AA131376	Hs.343809	fibroblast growth factor 12B	2.4	7.2
	419757	AA773820	Hs.63970	ESTs	2.4	3.3
	446100	AW967109	Hs.13604	hypothetical protein dJ462023.2	2.4	3.6
	439199	R40373	Hs.26299	ESTs	2.3	9.5
10	427627	R87582	Hs.179915	guanine nucleotide binding protein (G pr	2.3	5.6
	454048	H05626	Hs.6921	ESTs	2.3	9.9
	412675	AA460716	Hs.9788	hypothetical protein MGC10924 similar to	2.3	3.3
	434811	AW971205	Hs.114280	ESTs	2.3	6.7
	431677	AK000496	Hs.306989	hypothetical protein FLJ20489	2.3	3.1
15	451386	AB029006	Hs.26334	spastic paraplegia 4 (autosomal dominant	2.3	3.1
	447028	AJ973128	Hs.167257	brain link protein-1	2.3	5.6
	451050	AW937420	Hs.69662	ESTs	2.3	4.4
	437397	AA349847	Hs.4221	hypothetical protein DKFZp761H039	2.3	4.8
	408838	AJ669535	Hs.40369	ESTs	2.3	3.0
20	408777	U71204	Hs.47626	Ric (Drosophila)-like, expressed in neur	2.3	3.8
	453924	R49295	Hs.24886	ESTs	2.3	13.4
	422709	AA315331	Hs.153485	ESTs	2.3	4.4
	438911	AF085841	Hs.301920	ESTs	2.3	3.3
	439108	AW163034	Hs.6467	synaptogyrin 3	2.2	6.9
25	420297	AJ628272	Hs.88323	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.2	4.1
	404819			NM_002688*:Homo sapiens peanut (Drosophi	2.2	5.8
	422544	AB018259	Hs.118140	KIAA0716 gene product	2.2	11.8
	433597	AA708205	Hs.100343	ESTs	2.2	11.0
	440152	AB002376	Hs.7006	KIAA0378 protein	2.2	14.2
30	418375	NM_003081	Hs.84389	synaptosomal-associated protein, 25kD	2.2	82.9
	409892	AW956113	Hs.7149	gb:EST368183 MAGE resequences, MAGO Homo	2.2	4.2
	425287	R88249	Hs.155524	peanut (Drosophila)-like 2	2.2	6.0
	433657	AJ244368	Hs.8124	PH domain containing protein in retina 1	2.2	5.0
	438703	AJ803373	Hs.31599	ESTs	2.2	6.2
35	426845	AL157579	Hs.153610	KIAA0751 gene product	2.2	6.7
	417865	AW086059	Hs.6529	ESTs, Weakly similar to 178885 serine/th	2.2	3.5
	425897	AA935315	Hs.48965	Homo sapiens cDNA: FLJ21693 fs, clone C	2.2	3.2
	419271	N34901	Hs.238532	ESTs	2.2	7.5
	448548	R13209	Hs.21413	solute carrier family 12, (potassium-chl	2.2	7.3
40	439415	F05538	Hs.4273	ESTs	2.2	31.3
	415170	R44386	Hs.164578	ESTs	2.2	10.9
	423641	AL137256	Hs.130489	ATPase, aminophospholipid transporter-li	2.1	6.2
	443728	AJ083876	Hs.148383	ESTs	2.1	4.1
	452108	AW135982	Hs.203013	hypothetical protein FLJ12748	2.1	5.7
45	429037	X81895	Hs.194765	H.sapiens GENX-5624 mRNA, 3' UTR	2.1	7.1
	418900	BE207357	Hs.3454	KIAA1821 protein	2.1	4.3
	421268	AI126821	Hs.30514	ESTs	2.1	4.2
	446372	AB020644	Hs.14945	long fatty acyl-CoA synthetase 2 gene	2.1	15.6
	425741	AF052152	Hs.159412	Homo sapiens clone 24628 mRNA sequence	2.1	6.5
50	450214	BE439763	Hs.227571	regulator of G-protein signalling 4	2.1	3.3
	452738	AL133800	Hs.7086	hypothetical protein MGC12435	2.1	3.5
	447877	AI435184	Hs.164252	ESTs	2.1	5.1
	422421	AA325138	Hs.235873	hypothetical protein FLJ22672	2.1	8.3
	432882	NM_013257	Hs.279696	serum/glucocorticoid regulated kinase-II	2.1	4.2
55	410631	AA086469	Hs.47171	ESTs	2.1	5.8
	407808	AA663559	Hs.279789	histone deacetylase 3	2.1	5.7
	424379	Z42034	Hs.93597	cyclin-dependent kinase 5, regulatory su	2.1	3.2
	448410	AK000227	Hs.21126	hypothetical protein FLJ20220	2.1	3.0
	433932	AW954599	Hs.169330	neuronal protein	2.1	6.9
60	425130	AA448208	Hs.99163	ESTs	2.1	3.1
	402027			Target Exon	2.0	3.5
	435191	R15912	Hs.4817	Homo sapiens clone 24461 mRNA sequence	2.0	7.5
	420547	AF155140	Hs.98738	gonadotropin-regulated testicular RNA he	2.0	10.7
	404541			NM_030795:Homo sapiens stathmin-like 4 (	2.0	6.0
65	420050	AL118615	Hs.94653	neurochondrin	2.0	6.5
	417858	AJ078534	Hs.122592	ESTs	2.0	5.6
	416602	NM_006159	Hs.79389	nei (chicken)-like 2	2.0	3.2
	438315	BE390513	Hs.27935	hypothetical protein MGC4837	2.0	4.2
	439340	AB032436	Hs.6535	brain-specific Na-dependent inorganic ph	2.0	6.3
70	429900	AA460421	Hs.30875	ESTs	2.0	4.2
	437762	T78028	Hs.154679	synaptotagmin I	2.0	4.6
	425172	AA447729	Hs.12714	ESTs	2.0	3.1
	419587	S62907	Hs.91343	gamma-aminobutyric acid (GABA) A recepto	2.0	3.1
	451734	NM_006176	Hs.26944	neurogranin (protein kinase C substrate,	2.0	4.9
75	423603	AB007880	Hs.129883	Homo sapiens KIAA0420 mRNA, complete cds	2.0	4.3
	438277	AL022326	Hs.6139	synaptogyrin 1	2.0	3.4
	423767	H18283	Hs.132753	F-box only protein 2	2.0	3.2
	434933	R91095	Hs.4276	KIAA1701 protein	2.0	6.1
80	426575	M74826	Hs.170808	glutamate decarboxylase 2 (pancreatic is	2.0	4.6

TABLE 18B:

Key: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Pkey	CAT Number	Accession
408065	103646_1	AW954272 AI003154 AA059300 AA046911
415527	1539393_1	F11624 Z43212 H08936 R56332 H09256 R52303 R13075
415666	1543492_1	H72693 R08673 H72694 F20990 R08580
418512	176394_1	AW498974 T09332 R58460 AA350990 T33788 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074
		AW890649
418856	179788_1	T65754 AA229857 AA229658
420111	190755_1	AA255652 AA280911 AW967920 AA262684
422890	222707_1	Z43784 R13382 AW572911 AA449369 H17037 R19603 A1632565 AW004030 BE502530 Z25032 AA805324 AA449241 A1651825 A1264863 AW196918
		AA948267 A1953735 A1263703 AA319159 AW964436 A903440 AW594171 A1867447 AW204071 AW956110 C15618 D81142 H17038 AW162343
		T87230 AJ3
423731	231456_1	T08814 H19188 AL120538 AA330218 AW961552 N47159
424572	24097_1	M19650 R18810 R18721 AW896148 AW889520 AA192362 AA176814 F12085 BE255264 BE251393 T65248 AA380585 AA380465 BE408684
		AA459037 AW498869 AA776107 BE274289 D45269 M61958 AA378818 AW663180 AW672958 H08611 M78164 BE393721 AA348660 R36303
		AW498662 AA019090 AA001
424945	245223_1	A1221919 Z19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452358 N99604 AJ341345 AW298800 AA724961 AA931158 A1741227
		A1806660 A1982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 A1492961 A1361526 F04002 AA452141 T23551 A172655
		A193687 A1341
426919	273507_1	AL041228 D82004 D61361 A1203314 A1990307 AW900295 A1018308 AW087473 AW183530 AA393346 H50055 AA935601
433670	372721_1	AA604405 BE062234 AW748388
433921	377350_1	AA618174 A114549 R36464 R36465
433940	37787_1	H05129 H63433 A1651350 AA984734 A1368716 N40915 A989705 F09042 T03905 R88588 AF112220
436773	426857_1	AW078629 A1857375 N64357 AA731069
446692	689623_1	Z44514 A1352097 A1803984 AW235923 AW196558 A1954637 A1336983

TABLE 18C:

Pkey:	Unique number corresponding to an Eos probeset
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NT_position:	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NT_position
400844	9188605	Plus	24746-24872,25035-25204
402027	7622350	Plus	51645-51888,52917-53005
404541	8318559	Plus	103456-103664
404819	4678240	Plus	16223-18319,18427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578
405560	183148	Plus	5495-5655,6077-6241,6495-6692
405819	4007557	Plus	2830-2967
406311	9211559	Minus	137114-139033

TABLE 19A: ABOUT 356 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS

Table 19A lists about 356 CNS-enriched genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 85<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 3. The "average" CNS level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 95<sup>th</sup> percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

Pkey:	Unique Eos probeset identifier number
ExAccn:	Exemplar Accession number, Genbank accession number
UnigeneID:	Unigene number
Unigene Title:	Unigene gene title
R1:	Ratio of CNS to Glioblastoma
R2:	Ratio of CNS to NON-CNS NORMAL ADULT TISSUES

Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
425489	M58594	Hs.1905	prolactin	24.8	10.5
410330	AW023630	Hs.159425	ESTs	23.4	23.4
430538	AB032435	Hs.242821	differentiation-associated Na-dependent	22.6	22.6
417275	X63578	Hs.295449	parvalbumin	22.4	6.0
428505	AL035461	Hs.2281	chromogranin B (secretogranin 1)	21.8	21.8
408040	A1266496	Hs.22905	ESTs, Weakly similar to RHG6_HUMAN RHO-G	19.4	19.4
435145	A1277259	Hs.116631	ESTs	18.5	3.8
407039	X00368		gb.Human prolactin gene 5' region.	18.1	18.1
409263	AA069673	Hs.50319	ESTs	16.8	16.8
432298	AL118812	Hs.274293	Homo sapiens mRNA; cDNA DKFZp781G1111 (f	15.1	15.1
424645	NM_014682	Hs.151449	KIAA0535 gene product	15.1	15.1
416018	AW138239	Hs.78977	proprotein convertase subtilisin/kexin 1	14.0	14.0
405560	AW887701		hypothetical protein FLJ20628	13.9	8.0
452022	AW072330	Hs.293875	ESTs	13.8	13.8
413324	V00571	Hs.75294	corticotropin releasing hormone	13.2	13.2
411498	NM_014210	Hs.70499	ecotropic viral integration site 2A	12.9	19.4
423449	A1497900	Hs.33067	ESTs	12.4	14.5
433940	H05129		cyclic AMP-regulated phosphoprotein, 21	12.0	12.0
410657	AF063228	Hs.65248	dynein, cytoplasmic, intermediate polype	11.5	11.5
449078	AK001256	Hs.22975	KIAA1576 protein	11.0	16.1
410635	D58863	Hs.334372	chorionic somatomammotropin hormone 1 (p	11.0	6.6
453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	10.7	10.7
417167	AW206437	Hs.4290	ESTs	10.4	10.4
420033	D59502	Hs.292590	ESTs	10.4	10.4
413293	AL047483	Hs.302498	GTP-binding protein homologous to Saccha	10.0	10.0

	418207	C14685	Hs.34772	ESTs	9.8	9.8
	417175	R44558	Hs.94002	ESTs	9.6	8.9
	444330	AI597655	Hs.49265	ESTs	9.1	9.1
5	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	8.9	8.9
	429096	AB011106	Hs.196012	KIAA0534 protein	8.6	8.6
	428652	AA584272	Hs.336224	transmembrane protein with EGF-like end	8.6	8.6
	419347	C15944	Hs.50005	superior cervical ganglia, neural specific	8.6	22.2
	410309	BE043077	Hs.278153	ESTs	8.5	8.5
	416851	AW963951	Hs.85618	ESTs	8.5	8.5
10	427061	AB032971	Hs.173392	KIAA1145 protein	8.4	8.4
	400438	AF185611	Hs.115352	Target	8.3	5.1
	440209	H05049	Hs.247837	neurexin 3	8.2	18.7
	422756	AA441787	Hs.119689	glycoprotein hormones, alpha polypeptide	8.1	5.8
	435648	H24347	Hs.27524	ESTs	8.1	8.1
15	429470	AI878901	Hs.203862	guanine nucleotide binding protein (G pr	8.0	8.0
	416133	NM_001683	Hs.89512	ATPase, Ca transporting, plasma membrane	8.0	8.0
	408814	N62499	Hs.176227	hypothetical protein FLJ11155	7.9	8.6
	430004	U27768	Hs.227571	regulator of G-protein signaling 4	7.9	15.7
	438427	AI344378	Hs.143399	ESTs	7.8	7.8
20	434367	AB020700	Hs.3830	KIAA0893 protein	7.8	5.6
	429876	AB028977	Hs.225974	KIAA1054 protein	7.8	16.8
	441005	Z41305	Hs.303172	Homo sapiens mRNA; cDNA DKFZp547G133 (tr	7.7	7.7
	442023	AI187878	Hs.144549	ESTs	7.7	5.6
25	429033	NM_007374	Hs.194756	sine oculis homeobox (Drosophila) homolog	7.6	5.5
	450642	R39773	Hs.7130	copine IV	7.6	5.8
	437073	AI885608	Hs.94122	ESTs	7.5	7.5
	441264	AA927170	Hs.23290	ESTs	7.3	7.3
	424153	AA451737	Hs.141496	MAGE-like 2	7.3	5.1
30	450474	AW872844	Hs.117494	ESTs	7.2	7.2
	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	7.2	7.2
	415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	7.1	4.8
	423003	AL120077	Hs.122957	kelch (Drosophila)-like 2 (Mayven)	7.0	7.0
	433921	AA618174		gb:nc1401.s1 NCI_CGAP_Thy1 Homo sapiens	7.0	7.0
35	425352	NM_000939	Hs.1897	proopiomelanocortin (adrenocorticotropin	6.9	6.1
	457012	R41480	Hs.302754	ESTs	6.9	6.9
	445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	6.9	6.9
	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypotheti	6.9	6.9
	409031	AA376836	Hs.288858	ESTs	6.8	6.8
40	453590	AF150278	Hs.33578	KIAA0820 protein	6.6	22.3
	450181	H05254	Hs.201198	ESTs	6.6	7.2
	425580	L11144	Hs.1907	galanin	6.5	3.5
	445279	R41900	Hs.22245	ESTs	6.4	6.4
	428414	AL049980	Hs.184216	DKFZP564C152 protein	6.4	6.4
45	434104	AF116691	Hs.116459	hypothetical protein PRO2198	6.4	4.0
	443244	AI457235	Hs.166479	ESTs	6.3	3.0
	447750	AI422234	Hs.143434	contactin 1	6.2	9.8
	415114	D60468	Hs.94181	ESTs	6.0	6.0
	450600	BE079478	Hs.24880	ESTs	5.9	3.9
50	444458	BE041526	Hs.31746	hypothetical protein DKFZp547F072	5.9	7.7
	448958	AB020651	Hs.22653	KIAA0844 protein	5.9	5.9
	447138	AI439112	Hs.93828	ESTs, Weakly similar to 2109260A B cell	5.8	5.8
	414545	AA149287	Hs.76605	ESTs	5.8	3.6
	410389	AW954049	Hs.8177	ESTs, Weakly similar to PIHUB6 salivary	5.6	9.6
55	450590	AI701507	Hs.273740	ESTs	5.6	3.8
	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	5.6	5.6
	442026	AI243749	Hs.8074	brain-specific angiogenesis inhibitor 3	5.5	6.5
	450149	AW969781	Hs.132863	Zic family member 2 (odd-paired Drosophi	5.4	5.4
	414699	AI815523	Hs.76930	synuclein, alpha (non A4 component of am	5.3	4.5
60	438202	AW169287	Hs.22588	ESTs	5.3	5.3
	448605	AL109678	Hs.21597	Homo sapiens mRNA full length insert cDN	5.3	5.3
	418868	T65754		gb:yc11c07.s1 Stratagene lung (937210) H	5.3	3.8
	448786	BE048842	Hs.179075	Homo sapiens cDNA FLJ11881 fs, clone HE	5.2	5.2
	406311			NM_021979: Homo sapiens heat shock 70kD	5.2	11.5
65	443682	AI383061	Hs.47248	ESTs, Highly similar to similar to Cdc14	5.2	3.3
	415666	H72693		gb:yu03c11.1 Soares fetal liver spleen	5.2	5.2
	415101	R24854	Hs.268806	ESTs	5.2	3.3
	428508	BE252383	Hs.184668	SBB131 protein	5.2	4.1
	419318	AW969742	Hs.291005	ESTs	5.2	3.1
70	439238	N47305	Hs.302161	ESTs	5.1	5.3
	446353	AI290919	Hs.153661	ESTs	5.1	5.1
	412049	N53437	Hs.18268	adenylate kinase 5	5.1	10.7
	437331	AL353933	Hs.21710	hypothetical protein DKFZp761G0313	5.1	5.1
	413988	M81883	Hs.324784	glutamate decarboxylase 1 (brain, 67kD)	5.1	5.1
75	408068	AW148652	Hs.187398	ESTs	5.0	5.0
	414631	AW970130	Hs.65408	ESTs	4.9	4.9
	418527	AA450386	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	4.9	4.9
	425073	W39609	Hs.22003	solute carrier family 6 (neurotransmitte	4.9	4.9
	427224	AL135554	Hs.101937	sine oculis homeobox (Drosophila) homolo	4.9	3.9
80	433516	AA595802	Hs.33410	ESTs, Weakly similar to T17278 hypotheti	4.8	4.8
	427287	NM_014903	Hs.174188	KIAA0938 protein	4.8	4.8
	447252	R90916	Hs.12449	Homo sapiens transmembrane protein HTMP1	4.8	3.2
	424932	R14070	Hs.315369	Homo sapiens cDNA: FLJ23075 fs, clone L	4.7	10.2
	419643	F06066	Hs.91791	chromosome 11 open reading frame 25	4.7	4.7



	414949	C15314	Hs.323349	ESTs	4.7	3.8
	453534	NM_014796	Hs.33187	KIAA0748 gene product	4.7	4.7
	430537	X52692	Hs.2593	phosphodiesterase 6B, cGMP-specific, rod	4.6	4.6
5	453431	AF094754	Hs.32973	glycine receptor, beta	4.6	4.6
	453302	NM_000838	Hs.32945	glutamate receptor, metabotropic 1	4.6	4.6
	447104	R19085	Hs.210706	Homo sapiens cDNA FLJ13182 fs, clone NT	4.6	3.0
	418202	N48521	Hs.26549	KIAA1708 protein	4.6	5.8
	419191	U17195	Hs.89666	A kinase (PRKA) anchor protein 6	4.5	4.5
10	459080	AW192083	Hs.290855	ESTs	4.5	13.5
	451783	R42554	Hs.210862	T-box, brain, 1	4.4	11.2
	421952	AA300900	Hs.98849	ESTs, Moderately similar to AF161511.1 H	4.4	3.2
	451050	AW937420	Hs.69662	ESTs	4.4	4.4
	423728	AW891294	Hs.132136	solute carrier family 4, sodium bicarbon	4.4	7.9
	447746	AW015920	Hs.161359	ESTs	4.3	9.9
15	451301	AF769514	Hs.209890	EST	4.3	4.3
	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.3	4.3
	433109	N58907	Hs.162430	EST	4.3	3.9
	412155	R38167	Hs.12449	Homo sapiens transmembrane protein HTMP1	4.3	27.9
20	426365	AA376667	Hs.10283	RNA binding motif protein 8B	4.3	4.1
	423589	AA328082	Hs.209569	ESTs	4.2	4.2
	432453	A1885537	Hs.27172	ESTs, Moderately similar to PC4259 feni	4.2	3.9
	420489	AA815089	Hs.193513	ESTs	4.1	4.1
	427457	AW779105	Hs.164682	ESTs	4.1	11.1
25	408206	AF041853	Hs.43670	kinesin family member 3A	4.1	4.1
	433803	A1823593	Hs.27688	ESTs	4.1	4.1
	407868	NM_000950	Hs.40637	proline-rich Gta (G-carboxyglutamic acid	4.1	3.3
	448117	H49129	Hs.172982	ESTs	4.1	4.1
	442106	AW205881	Hs.326728	ESTs	4.1	3.2
30	450757	BE081050	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	4.0	3.2
	442042	A1990506	Hs.8077	Homo sapiens mRNA; cDNA DKFZp547E184 (fr	4.0	6.2
	458694	F12832	Hs.3610	ESTs	4.0	4.0
	452197	AW023595	Hs.232048	ESTs	4.0	4.0
	448583	NM_015239	Hs.21542	KIAA1035 protein	4.0	4.0
35	418940	H17739	Hs.288513	Human DNA sequence from clone RPS-899C14	3.9	7.0
	442412	R77677	Hs.346644	ESTs	3.9	3.9
	440293	A1004193	Hs.22123	ESTs	3.9	3.9
	433670	AA504405		gb:nc87h09.s1 NCI_CGAP_AA1 Homo sapiens	3.9	3.9
	459697	AA406062	Hs.98002	ESTs	3.9	5.4
40	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	3.9	3.3
	426054	U12431	Hs.166109	ELAV (embryonic lethal, abnormal vision,	3.9	3.9
	424001	W67883	Hs.137476	paternally expressed 10	3.8	5.4
	442676	A1733585	Hs.130897	ESTs	3.8	3.8
	410240	AL157424	Hs.61289	synaptotagmin 2	3.8	4.6
45	409339	AB020686	Hs.54037	ectonucleotide pyrophosphatase/phosphodi	3.7	3.6
	434998	AW975157	Hs.26037	ESTs	3.7	3.7
	439450	R51613	Hs.125304	ESTs	3.7	8.3
	455364	H72176	Hs.4273	hypothetical protein FLJ13159	3.7	4.9
	400844			NM_003105:Homo sapiens sortilin-related	3.7	3.1
50	458765	A1497900	Hs.33067	ESTs	3.7	3.7
	452687	T87219	Hs.13219	ESTs	3.6	3.6
	436773	AW078629		PC4 and SFRS1 interacting protein 1	3.6	3.6
	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	3.6	19.9
55	432149	AW514326	Hs.133483	ESTs, Weakly similar to T34549 probabli	3.6	12.2
	408119	W26213	Hs.101672	ESTs, Weakly similar to T00331 hypotheti	3.6	3.6
	449093	AB035356	Hs.22998	neuraxin 1	3.6	3.8
	426968	U07616	Hs.173034	amphiphysin (Stiff-Mann syndrome with br	3.6	15.3
	410011	AB020641	Hs.57856	PFTAIKE protein kinase 1	3.6	10.0
	442738	AW002370	Hs.131055	ESTs, Weakly similar to NPM_HUMAN NUCLEO	3.5	3.5
60	451032	WQ3692	Hs.323079	Homo sapiens mRNA; cDNA DKFZp564P116 (fr	3.5	4.9
	449117	AW449310	Hs.210262	ESTs, Weakly similar to HSS2_HUMAN HEPAR	3.5	3.5
	416490	AF090116	Hs.79348	regulator of G-protein signalling 7	3.5	12.5
	412268	N59006	Hs.26133	ESTs	3.5	30.9
	452311	AW304029	Hs.252744	ESTs	3.5	3.5
65	425649	U30930	Hs.158540	UDP glycosyltransferase 8 (UDP-galactose	3.5	38.6
	410224	M55513	Hs.150208	potassium voltage-gated channel, shaker-	3.4	3.4
	451516	A1800515	Hs.12024	ESTs	3.4	6.3
	400098			Eos Control	3.4	3.4
	424918	R13982	Hs.169309	myelin-associated oligodendrocyte basic	3.4	5.3
70	452238	F01811	Hs.345757	ESTs	3.3	3.8
	417063	N50515	Hs.45061	ESTs	3.3	3.3
	443992	AW022228	Hs.322922	ESTs	3.3	13.1
	412453	R20205	Hs.75236	ESTs	3.3	3.3
	450561	R49674	Hs.25909	ESTs	3.3	3.3
75	415527	F11624		gb:HSC2ZD101 normalized infant brain cDN	3.3	3.3
	427386	AW836261	Hs.6727	ESTs	3.3	3.3
	423346	A1267677	Hs.127416	synaptotagmin 1	3.2	20.1
	431342	AW971018	Hs.21659	ESTs	3.2	8.0
	448533	AL119710	Hs.21365	nucleosome assembly protein 1-like 3	3.2	9.6
80	442879	AF032922	Hs.8813	synaptin binding protein 3	3.2	3.2
	417284	N62889	Hs.107242	Homo sapiens cDNA FLJ12965 fs, clone NT	3.2	3.2
	429477	A1275514	Hs.6658	ESTs	3.2	3.2
	410343	AA084273	Hs.76561	ESTs, Weakly similar to S47072 finger pr	3.2	3.2
	427317	AB028955	Hs.175780	KIAA1032 protein	3.2	5.3

5	408039	AA131424	Hs.335636	ESTs	3.2	3.2
	426976	AL037824	Hs.194695	ras homolog gene family, member 1	3.2	17.4
	420297	AI628272	Hs.88323	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.2	4.1
	453919	AW959912	Hs.7076	KIAA1705 protein	3.2	3.2
	428963	AW382682	Hs.258208	Homo sapiens, clone MGC:15606, mRNA, com	3.2	3.3
	423829	RA4107	Hs.240905	ESTs	3.1	4.4
	424087	N69333	Hs.143434	contactin 1	3.1	3.1
	419852	AW503756	Hs.286184	hypothetical protein dJ55102.5	3.1	4.1
10	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	3.1	43.2
	422234	AF119818	Hs.113287	discs, large (Drosophila) homolog-associ	3.1	3.1
	446692	Z44514		Homo sapiens mRNA for KIAA1763 protein,	3.1	33.0
	437117	AL049256	Hs.122593	ESTs	3.1	3.8
	405819			NM_002578:Homo sapiens p21 (CDKN1A)-acti	3.1	13.5
15	452752	AW044058	Hs.33578	KIAA0820 protein	3.1	13.4
	416220	N49776	Hs.170994	hypothetical protein MGC10948	3.1	4.5
	437380	AL359577	Hs.112198	Homo sapiens mRNA; cDNA DKFZp547M073 (fr	3.0	3.8
	428001	H97428	Hs.219307	ESTs, Moderately similar to Transforming	3.0	5.9
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	3.0	3.0
20	447673	AI823987	Hs.182285	ESTs	3.0	3.0
	427283	AL119796	Hs.174185	ectonucleotide pyrophosphatase/phosphodi	3.0	3.0
	424724	T06532	Hs.287709	Homo sapiens cDNA: FLJ22674 fs, clone H	3.0	3.0
	408547	AA574291	Hs.57837	ESTs	3.0	4.0
	433315	R96754	Hs.239706	GRB2-associated binding protein 1	3.0	3.1
25	439274	AF086092	Hs.48372	ESTs	3.0	18.3
	410765	AI694972	Hs.66180	nucleosome assembly protein 1-like 2	3.0	8.0
	458268	AA428403	Hs.106131	ESTs	3.0	3.9
	424641	AB001106	Hs.151413	gla maturation factor, beta	3.0	5.6
	441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	3.0	14.9
30	442593	R39604	Hs.31961	ESTs	2.9	6.7
	426380	AI291267	Hs.149990	ESTs	2.9	6.9
	428536	AI143139	Hs.2288	visinin-like 1	2.9	22.1
	417417	F05745	Hs.89512	ATPase, Ca transporting, plasma membrane	2.9	17.1
	411379	AI816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	2.9	11.2
35	422414	AW875237	Hs.13701	ESTs	2.9	5.3
	428186	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	2.9	3.9
	419518	U79289	Hs.90798	Human clone Z3695 mRNA sequence	2.9	3.6
	426919	AL041228		ELAV (embryonic lethal, abnormal vision,	2.9	9.0
	446544	AI631932	Hs.7047	ESTs, Weakly similar to Unknown [H.sapie	2.8	12.4
40	422411	AW749443	Hs.22511	ESTs	2.8	12.0
	416874	H98752	Hs.42568	ESTs	2.8	6.0
	448902	Z45998	Hs.22543	Homo sapiens mRNA; cDNA DKFZp7611912 (f	2.8	21.8
	430456	AA314998	Hs.241503	hypothetical protein	2.8	4.7
	428859	NM_007050	Hs.225952	protein tyrosine phosphatase, receptor t	2.8	5.1
45	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	2.8	13.1
	437948	AA772920	Hs.303527	ESTs	2.8	24.8
	440105	AA694010	Hs.6932	Homo sapiens clone Z3809 mRNA sequence	2.8	8.2
	414931	AK000342	Hs.77646	Homo sapiens mRNA; cDNA DKFZp761M0223 (f	2.8	3.4
	416530	U62801	Hs.79361	kallikrein 6 (neurokin, zyme)	2.8	4.4
50	446574	AI310135	Hs.335933	ESTs	2.8	3.5
	422890	Z43784		ankyrin 3, node of Ranvier (ankyrin G)	2.8	3.6
	410711	AB002316	Hs.65746	KIAA0318 protein	2.7	6.1
	422980	N46569	Hs.76722	CCAAT/enhancer binding protein (C/EBP),	2.7	45.2
	408554	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	2.7	3.7
55	434460	AA478486	Hs.3852	KIAA0368 protein	2.7	4.8
	431988	AC002302	Hs.77202	protein kinase C, beta 1	2.7	10.5
	447163	AW282770	Hs.5542	DnaJ (Hsp40) homolog, subfamily C, membe	2.7	3.4
	437924	AI935344	Hs.164118	ESTs, Weakly similar to SLS1_HUMAN SODIU	2.6	3.2
	424945	AI221919		hypothetical protein FLJ10582	2.6	30.5
60	425984	AW836277	Hs.165636	hypothetical protein DKFZp761C07121	2.6	29.3
	447761	AF061573	Hs.19492	protocadherin 8	2.6	6.3
	425138	H08849	Hs.167464	glutamate receptor, ionotropic, N-methyl	2.6	4.2
	436568	H12049	Hs.91584	ESTs	2.6	6.8
	408065	AW954272		gb:EST366342 MAGE resequences, MAGE Homo	2.6	5.6
65	430287	AW182459	Hs.125759	ESTs, Weakly similar to LEU5_HUMAN LEUKE	2.6	7.6
	408777	U71204	Hs.47626	Ric (Drosophila)-like, expressed in neur	2.6	3.8
	420173	AA256151	Hs.22999	ESTs	2.6	4.1
	429550	AW293055	Hs.119357	ESTs	2.6	6.4
	438068	AI927209	Hs.306210	Homo sapiens cDNA: FLJ23133 fs, clone L	2.6	5.1
70	424264	D80400	Hs.239388	Human DNA sequence from clone RP1-304B14	2.6	7.3
	432809	AA565509	Hs.131703	ESTs	2.6	9.9
	407888	AW969688	Hs.100826	ESTs	2.5	20.2
	445225	AI216555	Hs.202398	ESTs	2.5	5.5
	415257	F03016	Hs.27513	ESTs	2.5	8.6
75	423135	N67655	Hs.26411	ESTs	2.5	8.2
	438283	AI458931	Hs.37282	ESTs	2.5	7.5
	454053	AW023006	Hs.27172	ESTs, Moderately similar to PC4259 ferri	2.4	3.6
	443150	AI034467	Hs.34650	ESTs	2.4	7.8
	429956	AI374651	Hs.22542	ESTs	2.4	3.2
80	428392	H10233	Hs.2265	secretory granule, neuroendocrine protei	2.4	42.3
	437268	AI754847	Hs.227571	regulator of G-protein signaling 4	2.4	14.0
	426529	AF090100	Hs.170241	Homo sapiens clone IMAGE 23915	2.4	5.1
	430347	NM_002039	Hs.239706	GRB2-associated binding protein 1	2.4	3.2
	422949	AA319435		gb:EST21657 Adrenal gland tumor Homo sap	2.4	7.4

5	451952	AL120173	Hs.301663	ESTs	2.4	19.2
	434277	X77748	Hs.3786	glutamate receptor, metabotropic 3	2.4	28.5
	422927	AW247388	Hs.301423	calcium binding protein 1 (calbrain)	2.4	3.0
	425121	AI797511	Hs.154679	synaptotagmin I	2.4	3.9
	435059	Z45270	Hs.235873	hypothetical protein FLJ22672	2.4	4.8
10	446377	AW014022	Hs.170953	ESTs	2.4	3.3
	452371	RA0990	Hs.21658	ESTs	2.4	3.3
	419103	Z40229	Hs.96423	hypothetical protein FLJ23033	2.4	8.4
	427658	H61387	Hs.30868	nogo receptor	2.4	3.0
	448100	AW967109	Hs.13804	hypothetical protein dJ462023.2	2.3	3.6
15	439607	BE540565	Hs.159460	ESTs	2.3	5.6
	412949	AI471639	Hs.71913	ESTs	2.3	3.7
	419757	AA773820	Hs.63970	ESTs	2.3	3.3
	410037	AB020725	Hs.58009	KIAA0918 protein	2.3	12.2
	451386	AB029006	Hs.26334	spastic paraplegia 4 (autosomal dominant)	2.3	3.1
20	409953	AA332277	Hs.57691	cadherin 18, type 2	2.3	5.5
	419629	AB020695	Hs.91662	KIAA0888 protein	2.3	13.4
	434792	AA649253	Hs.132458	ESTs	2.3	3.8
	429006	AA443143	Hs.50929	hypothetical protein FLJ13842	2.3	6.6
	445194	AI215667	Hs.175044	ESTs	2.3	3.1
25	422491	AA338548	Hs.117546	neuronatin	2.3	3.6
	415734	NM_014747	Hs.78748	KIAA0237 gene product	2.3	27.4
	434933	R91095	Hs.4276	KIAA1701 protein	2.2	6.1
	424922	BE366547	Hs.217112	hypothetical protein MGC10825	2.2	3.7
	426325	D28114	Hs.169309	myelin-associated oligodendrocyte basic	2.2	81.1
30	424140	Z48051	Hs.141308	myelin oligodendrocyte glycoprotein	2.2	56.0
	418410	AAB11441	Hs.107393	chromosome 3 open reading frame 4	2.2	3.9
	409746	NM_004794	Hs.56294	RAB33A, member RAS oncogene family	2.2	10.6
	439239	AI031540	Hs.235331	ESTs	2.2	49.5
	450310	N62341	Hs.94116	ESTs	2.2	3.6
35	453924	R49295	Hs.24886	ESTs	2.2	13.4
	411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	2.2	6.6
	404819			NM_002688: Homo sapiens peanut (Drosophi	2.2	5.8
	449568	AL157479	Hs.23740	KIAA1598 protein	2.2	3.6
	419271	N34901	Hs.238532	ESTs	2.2	7.5
40	424474	AA308883	Hs.148680	calcyon; D1 dopamine receptor-interactin	2.2	3.6
	438208	AL041224	Hs.65379	ESTs	2.2	5.8
	424458	M29273	Hs.1780	myelin associated glycoprotein	2.2	10.1
	421790	AW896201	Hs.22654	sodium channel, voltage-gated, type 1, a	2.2	4.1
	432882	NM_013257	Hs.279696	serum/glucocorticoid regulated kinase-II	2.1	4.2
45	419863	AW952691	Hs.93485	Homo sapiens mRNA; cDNA DKFZp7610191 (fr	2.1	21.4
	449277	AA001064	Hs.43670	ESTs	2.1	8.5
	420156	AW449258	Hs.6187	ESTs	2.1	12.5
	452738	AL133800	Hs.7086	hypothetical protein MGC12435	2.1	3.5
	410366	AI267589	Hs.302689	hypothetical protein	2.1	10.4
50	452106	AI141031	Hs.21342	ESTs	2.1	3.4
	413409	AI638418	Hs.1440	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	2.1	9.4
	423641	AL137256	Hs.130489	ATPase, aminophospholipid transporter-5	2.1	6.2
	410909	AW898161	Hs.53112	ESTs, Moderately similar to ALU8_HUMAN A	2.1	12.5
	410631	AA086469	Hs.47171	ESTs	2.1	5.8
55	412675	AA460716	Hs.9788	hypothetical protein MGC10924 similar to	2.1	3.3
	448299	AA497044	Hs.20887	hypothetical protein FLJ10392	2.1	11.5
	444124	R43097	Hs.6818	ESTs	2.1	9.3
	408950	AA707814	Hs.14945	long fatty acyl-CoA synthetase 2 gene	2.1	8.5
	427736	AA788898	Hs.179902	transporter-like protein	2.1	4.0
60	429024	AI652297	Hs.119302	complement-c1q tumor necrosis factor-rel	2.1	3.7
	420071	AB028985	Hs.94806	ATP-binding cassette, sub-family A (ABC1	2.1	5.1
	408822	AW500715	Hs.57079	Homo sapiens cDNA FLJ13267 fis, clone OV	2.1	3.0
	424790	AL119344	Hs.13326	ESTs, Weakly similar to 2004399A chromos	2.1	23.1
	426814	AF036943	Hs.172619	myelin transcription factor 1-like	2.1	14.2
65	425130	AA448208	Hs.99163	ESTs	2.1	3.1
	449714	AB033015	Hs.23941	KIAA1189 protein	2.0	7.5
	439108	AW163034	Hs.6467	synaptogyrin 3	2.0	6.9
	415669	NM_005025	Hs.78589	serine (or cysteine) proteinase inhibitor	2.0	10.2
	435040	AI932350	Hs.152825	ESTs	2.0	4.7
70	440152	AB002376	Hs.7006	KIAA0378 protein	2.0	14.2
	445102	AW204610	Hs.22270	ESTs	2.0	19.2
	436734	AF937612	Hs.273758	hypothetical protein FLJ23112	2.0	4.7
	437414	AW894071	Hs.48448	hypothetical protein DKFZp547C176	2.0	6.4
	418512	AW498974		diacylglycerol kinase, zeta (104kD)	2.0	7.9
75	453169	AB037815	Hs.32156	KIAA1394 protein	2.0	5.7
	420050	AL118615	Hs.94653	neurochondrin	2.0	6.5
	429900	AA460421	Hs.30875	ESTs	2.0	4.2
	432447	X92681	Hs.2998	contactin 2 (axonal)	2.0	4.1
	431677	AK000496	Hs.306989	hypothetical protein FLJ20489	2.0	3.1
80	452856	AF034799	Hs.30881	protein tyrosine phosphatase, receptor 1	2.0	10.7
	448681	AL109781	Hs.21754	Homo sapiens mRNA full length insert cDN	2.0	7.2
	453754	AW972580	Hs.172753	ESTs	2.0	3.4
	422544	AB018259	Hs.118140	KIAA0716 gene product	2.0	11.8
	416836	D54745	Hs.80247	cholecystokinin	2.0	6.8
	454048	H05626	Hs.6921	ESTs	2.0	9.9
	425741	AF052152	Hs.159412	Homo sapiens clone 24628 mRNA sequence	2.0	6.5

TABLE 19B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

5	Pkey	CAT Number	Accession
	408065	103646_1	AW954272 AJ003154 AA059300 AA046911
	415527	1539393_1	F11624 Z43212 H08936 R56332 H09256 R52303 R13075
10	415666	1543492_1	H72693 R08673 H72694 F20990 R08580
	418512	176394_1	AW498974 T09332 R58460 AA350990 T33786 T30936 AA350905 T08592 T09274 AA224297 D54678 T08951 R15346 AW953188 AA350074
			AW890649
	418856	179768_1	T65754 AA229857 AA229558
	422890	222707_1	Z43784 R13382 AW572911 AA449369 H17037 R19603 AJ632565 AW004030 BE502530 Z25032 AA805324 AA449241 AJ651825 AJ264863 AW196918
15			AA948267 AJ953735 AJ263703 AA319159 AW964436 AJ903440 AW594171 AJ867447 AW204071 AW956110 C15616 D81142 H17038 AW162343
			T87230 AJ3
	422949	223184_1	AA319435 N56456 AA319377 AW961532 T48452 AA894424
	424945	245223_1	AJ221919 Z19967 AA348780 AW984077 AW166028 BE540193 N94800 AA452368 N99604 AJ341345 AW298800 AA724961 AA931158 AJ741227
			AJ806660 AJ982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 AJ492961 AJ361526 F04002 AA452141 T23551 AJ472655
			AJ193667 AJ341
20	426919	273507_1	AL041228 D82004 D61361 AJ203314 AJ990307 AW900295 AJ018308 AW087473 AW183530 AA393346 H50055 AA935601
	433670	372721_1	AA504405 BE062234 AW748388
	433921	377350_1	AA518174 AJ114549 R36464 R36465
	433940	37787_1	H05129 N63433 AJ651350 AA984734 AJ368716 N40915 AJ989705 F09042 T03905 R88588 AF112220
25	436773	426857_1	AW078629 AJ857375 N64357 AA731069
	446692	689623_1	Z44514 AJ352097 AJ803984 AW235923 AW196558 AJ954637 AJ36983

TABLE 19C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

35	Pkey	Ref	Strand	NL_position
	400844	9188605	Plus	24746-24872,25035-25204
	404819	4678240	Plus	16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578
	405560	183148	Plus	5495-5655,6077-6241,6495-6692
	405819	4007557	Plus	2830-2967
40	406311	9211559	Minus	137114-139033

TABLE 20A: ABOUT 328 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS

Table 20A lists about 328 CNS-enriched genes significantly down-regulated in lower grade glioblastoma (LGG) compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos HuD3 GeneChip array such that the ratio of "average" normal CNS to "average" LGG was greater than or equal to 2. The "average" normal CNS level was set to the 85th percentile amongst various normal CNS tissues. The "average" LGG level was set to the 85th percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 3. The "average" CNS level was set to the 85th percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 95th percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of CNS compared to LOWER GRADE GLIOBLASTOMA  
 R2: Ratio of CNS compared to NON-CNS NORMAL ADULT TISSUE

60	Pkey	ExAccn	UnigenelD	Unigene Title	R1	R2
	425580	L11144	Hs.1907	galatin	33.1	3.5
	425489	M58594	Hs.1905	protactin	24.7	10.5
	430538	AB032435	Hs.242821	differentiation-associated Na-dependent	22.6	22.6
	417275	X63578	Hs.295449	parvalbumin	22.4	6.0
	428505	AL035461	Hs.2281	chromogranin B (secretogranin 1)	21.8	21.8
	408040	AJ266496	Hs.22905	ESTs, Weakly similar to RHG6_HUMAN RHO-G	19.4	19.4
	435145	AJ277259	Hs.116631	ESTs	18.5	3.8
65	407039	X00368		gb:Human protactin gene 5' region.	18.1	18.1
	428976	AL037824	Hs.194695	ras homolog gene family, member 1	17.4	17.4
	409263	AA069573	Hs.50319	ESTs	16.8	16.8
	424645	NM_014682	Hs.151449	KIAA0535 gene product	15.1	15.1
	416018	AW138239	Hs.78977	proprotein convertase subtilisin/kexin 1	14.0	14.0
70	405560	AW887701		hypothetical protein FLJ20628	13.9	8.0
	452022	AW072330	Hs.293875	ESTs	13.8	13.8
	433940	H05129		cyclic AMP-regulated phosphoprotein, 21	12.0	12.0
	413324	V00571	Hs.75294	corticotropin releasing hormone	12.0	13.2
	410657	AF063228	Hs.65248	dynein, cytoplasmic, intermediate polype	11.5	11.5
75	410330	AW023630	Hs.159425	ESTs	11.1	23.4
	453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	10.7	10.7
	420297	AJ828272	Hs.88323	ESTs, Weakly similar to ALU1_HUMAN ALU S	10.5	4.1
	417167	AW206437	Hs.4290	ESTs	10.4	10.4
	420033	D59502	Hs.292590	ESTs	10.4	10.4
80	413293	AL047483	Hs.302498	GTP-binding protein homologous to Saacha	10.0	10.0
	426380	AJ291267	Hs.149990	ESTs	9.8	6.9
	410635	D58863	Hs.334372	chorionic somatomammotropin hormone 1 (p	9.5	6.6
	422756	AA441787	Hs.119689	glycoprotein hormones, alpha polypeptide	9.1	5.8

	444330	AI597655	Hs.49265	ESTs	9.1	9.1
	427322	AK002017	Hs.176227	hypothetical protein FLJ111155	8.9	8.9
	421633	AF121860	Hs.106260	sorting nexin 10	8.6	6.7
	429096	AB011106	Hs.196012	KIAA0534 protein	8.6	8.6
5	428652	AA584272	Hs.336224	transmembrane protein with EGF-like and	8.6	8.6
	410309	BE043077	Hs.278153	ESTs	8.5	8.5
	424932	R14070	Hs.315369	Homo sapiens cDNA: FLJ23075 fis, clone L	8.5	10.2
	417175	R44558	Hs.84002	ESTs	8.4	8.9
	427061	AB032971	Hs.173392	KIAA1145 protein	8.4	8.4
10	400438	AF185611	Hs.115352	Target	8.3	5.1
	418207	C14685	Hs.34772	ESTs	8.2	9.8
	440209	H05049	Hs.247837	neuraxin 3	8.1	18.7
	428876	AB028977	Hs.225974	KIAA1054 protein	8.1	16.8
	429470	AI878901	Hs.203862	guanine nucleotide binding protein (G pr	8.0	8.0
15	430004	U27768	Hs.227571	regulator of G-protein signalling 4	7.9	15.7
	436427	AI344378	Hs.143399	ESTs	7.8	7.8
	408814	N62499	Hs.176227	hypothetical protein FLJ111155	7.8	8.6
	434367	AB020700	Hs.3830	KIAA0893 protein	7.7	5.6
	441005	Z41305	Hs.303172	Homo sapiens mRNA; cDNA DKFZp547G133 (fr	7.7	7.7
20	416851	AW963951	Hs.85618	ESTs	7.7	8.5
	429033	NM_007374	Hs.194756	sine oculis homeobox (Drosophila) homolo	7.6	5.5
	437073	AB85608	Hs.94122	ESTs	7.5	7.5
	441264	AA927170	Hs.23290	ESTs	7.3	7.3
	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	7.2	7.2
25	415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	7.1	4.8
	410011	AB020641	Hs.57856	PPTAIRE protein kinase 1	7.1	10.0
	423003	AL120077	Hs.122967	ketch (Drosophila)-like 2 (Mayven)	7.0	7.0
	433921	AA618174		gb:nq14f01.s1 NCI_CGAP_Thy1 Homo sapiens	7.0	7.0
30	457012	R41480	Hs.302754	ESTs	6.9	6.9
	445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	6.9	6.9
	425352	NM_000939	Hs.1897	proopiomelanocortin (adrenocorticotropin	6.9	6.1
	433558	AA633757	Hs.201769	ESTs, Weakly similar to T24435 hypotheti	6.9	6.9
	409031	AA376836	Hs.288856	ESTs	6.8	6.8
35	419347	C15944	Hs.90005	superiorcervical ganglia, neural specif	6.5	22.2
	445279	R41900	Hs.22245	ESTs	6.4	6.4
	437414	AW894071	Hs.48448	hypothetical protein DKFZp547C176	6.4	6.4
	428414	AL049980	Hs.184216	DKFZP564C152 protein	6.4	6.4
	434104	AF116691	Hs.116459	hypothetical protein PRO2198	6.4	4.0
	443244	AJ457235	Hs.166479	ESTs	6.3	3.0
40	447761	AF061573	Hs.19492	protocadherin 8	6.3	6.3
	450600	BE079478	Hs.24880	ESTs	6.2	3.9
	427457	AW779105	Hs.164682	ESTs	6.2	11.1
	416133	NM_001683	Hs.89512	ATPase, Ca transporting, plasma membrane	6.1	8.0
45	432453	AJ885537	Hs.27172	ESTs, Moderately similar to PC4259 term	6.0	3.9
	432298	AL118812	Hs.274293	Homo sapiens mRNA; cDNA DKFZp761G1111 (f	6.0	15.1
	415114	D60468	Hs.94181	ESTs	6.0	6.0
	416101	R24854	Hs.268806	ESTs	5.9	3.3
	448958	AB020651	Hs.22653	KIAA0844 protein	5.9	5.9
50	447138	AJ439112	Hs.93828	ESTs, Weakly similar to 2109260A B cell	5.8	5.8
	414545	AA149287	Hs.76605	ESTs	5.8	3.6
	424153	AA451737	Hs.141496	MAGE-like 2	5.7	5.1
	424541	AB001106	Hs.151413	glia maturation factor, beta	5.6	5.6
	410389	AW954049	Hs.8177	ESTs, Weakly similar to PIHUB6 salivary	5.6	9.6
55	432149	AW614326	Hs.133483	ESTs, Weakly similar to T34549 probable	5.6	12.2
	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	5.6	5.6
	443912	R37257	Hs.184780	ESTs	5.5	6.1
	442023	AJ187878	Hs.144549	ESTs	5.5	5.6
	450642	R39773	Hs.7130	coopine IV	5.4	5.6
60	439772	AL365406	Hs.10268	Homo sapiens mRNA full length insert cDN	5.4	9.8
	450149	AW969781	Hs.132863	Zic family member 2 (odd-paired Drosophi	5.4	5.4
	438202	AW169287	Hs.22588	ESTs	5.3	5.3
	448605	AL109678	Hs.21597	Homo sapiens mRNA full length insert cDN	5.3	5.3
	418868	T65754		gb:yc11c07.s1 Stralagene lung (937210) H	5.3	3.8
65	448786	BE048842	Hs.179075	Homo sapiens cDNA FLJ11881 fis, clone HE	5.2	5.2
	443682	AJ383061	Hs.47248	ESTs, Highly similar to similar to Cdc14	5.2	3.3
	415668	H72693		gb:yu03c11.1 Soares fetal liver spleen	5.2	5.2
	428508	BE252383	Hs.184668	SBB131 protein	5.2	4.1
	446353	AI290919	Hs.153661	ESTs	5.1	5.1
70	442106	AW205881	Hs.326728	ESTs	5.1	3.2
	437331	AL353933	Hs.21710	hypothetical protein DKFZp761G0313	5.1	5.1
	419318	AW969742	Hs.291005	ESTs	5.0	3.1
	408068	AW148652	Hs.167398	ESTs	5.0	5.0
	434149	Z43829	Hs.244624	hypothetical protein MGC5469	5.0	5.0
75	439238	N47305	Hs.302161	ESTs	4.9	5.3
	414631	AW970130	Hs.65406	ESTs	4.9	4.9
	447104	R19085	Hs.210706	Homo sapiens cDNA FLJ13182 fis, clone NT	4.9	3.0
	418527	AA450386	Hs.7149	Homo sapiens cDNA: FLJ21950 fis, clone H	4.9	4.9
	425073	W39609	Hs.22003	solute carrier family 6 (neurotransmitte	4.9	4.9
80	433516	AA595802	Hs.33410	ESTs, Weakly similar to T17279 hypotheti	4.8	4.8
	427287	NM_014903	Hs.174188	KIAA0938 protein	4.8	4.8
	447252	R90918	Hs.12449	Homo sapiens transmembrane protein HTMP1	4.8	3.2
	419643	F06068	Hs.91791	chromosome 11 open reading frame 25	4.7	4.7
	414949	C15314	Hs.323349	ESTs	4.7	3.8

	429900	AA460421	Hs.30875	ESTs	4.7	4.2
	422949	AA319435		gb:EST21657 Adrenal gland tumor Homo sap	4.7	7.4
	430537	X62692	Hs.2593	phosphodiesterase 6B, cGMP-specific, rod	4.6	4.6
	419191	U17195	Hs.89666	A kinase (PRKA) anchor protein 6	4.5	4.5
5	421952	AA300900	Hs.98849	ESTs, Moderately similar to AF161511.1 H	4.4	3.2
	406311			NM_021979: Homo sapiens heat shock 70kD	4.4	11.5
	451050	AW937420	Hs.69662	ESTs	4.4	4.4
	423728	AW891294	Hs.132136	solute carrier family 4, sodium bicarbon	4.4	7.9
10	411498	NM_014210	Hs.70499	ecotropic viral integration site 2A	4.3	19.4
	451301	A1769514	Hs.209890	EST	4.3	4.3
	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.3	4.3
	433109	N58907	Hs.162430	EST	4.3	3.9
	423589	AA328082	Hs.209569	ESTs	4.2	4.2
15	427224	AL135554	Hs.101837	shc oculis homeobox (Drosophila) homolog	4.2	3.9
	420489	AA815089	Hs.193513	ESTs	4.1	4.1
	408206	AF041853	Hs.43670	kinesin family member 3A	4.1	4.1
	418202	N48521	Hs.26549	KIAA1708 protein	4.1	5.8
	448117	H49129	Hs.172982	ESTs	4.1	4.1
20	412155	R38187	Hs.12449	Homo sapiens transmembrane protein HTMP1	4.0	27.9
	458694	F12832	Hs.3610	ESTs	4.0	4.0
	452197	AW023595	Hs.232048	ESTs	4.0	4.0
	408547	AA574291	Hs.57837	ESTs	4.0	4.0
	433447	U29195	Hs.3281	neuronal pentraxin II	4.0	3.7
25	448583	NM_015239	Hs.21542	KIAA1035 protein	4.0	4.0
	442412	R77677	Hs.346644	ESTs	3.9	3.9
	440293	A1004193	Hs.22123	ESTs	3.9	3.9
	426365	AA376667	Hs.10283	RNA binding motif protein 8B	3.9	4.1
30	400844			NM_003105: Homo sapiens sortilin-related	3.9	3.1
	426054	U12431	Hs.166109	ELAV (embryonic lethal, abnormal vision,	3.9	3.9
	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	3.8	3.3
	408777	U17204	Hs.47626	Ric (Drosophila)-like, expressed in neur	3.8	3.8
	442676	A1733585	Hs.130897	ESTs	3.8	3.8
	414699	A1815523	Hs.76930	synuclein, alpha (non A4 component of am	3.8	4.5
35	436476	AA326108	Hs.33829	bHLH protein DEC2	3.8	3.3
	434998	AW975157	Hs.26037	ESTs	3.7	3.7
	412049	N53437	Hs.18268	adenylate kinase 5	3.7	10.7
	416220	N49776	Hs.170994	hypothetical protein MGC10946	3.7	4.5
40	459697	AA406062	Hs.98002	ESTs	3.7	5.4
	435648	H24347	Hs.27524	ESTs	3.7	8.1
	442042	A1950506	Hs.6077	Homo sapiens mRNA: cDNA DKFZp547E184 (tr	3.7	6.2
	456765	A1497900	Hs.33067	ESTs	3.7	3.7
	434933	R91095	Hs.4276	KIAA1701 protein	3.6	6.1
	419518	U79289	Hs.90798	Human clone Z3695 mRNA sequence	3.6	3.6
45	452667	T87219	Hs.13219	ESTs	3.6	3.6
	436773	AW078629		PC4 and SFRS1 interacting protein 1	3.6	3.6
	408119	W26213	Hs.101672	ESTs, Weakly similar to T00331 hypotheti	3.6	3.6
	453534	NM_014796	Hs.33187	KIAA0748 gene product	3.6	4.7
50	449093	AB035356	Hs.22998	neurexin 1	3.6	3.6
	442738	AW002370	Hs.131055	ESTs, Weakly similar to NPM_HUMAN NUCLEO	3.5	3.5
	447746	AW015920	Hs.161359	ESTs	3.5	9.9
	449117	AW449310	Hs.210262	ESTs, Weakly similar to HSS2_HUMAN HEPAR	3.5	3.5
	447750	A1422234	Hs.143434	contactin 1	3.5	9.8
	453590	AF150278	Hs.33578	KIAA0820 protein	3.5	22.3
55	409339	AB020686	Hs.54037	ectonucleotide pyrophosphatase/phosphodi	3.5	3.6
	410240	AL157424	Hs.61289	synaptotagmin 2	3.5	4.6
	410224	M55513	Hs.150208	potassium voltage-gated channel, shaker-	3.4	3.4
	400098			Eos Control	3.4	3.4
60	450181	H05254	Hs.201198	ESTs	3.4	7.2
	459080	AW192083	Hs.290855	ESTs	3.4	13.5
	417063	N50515	Hs.45061	ESTs	3.3	3.3
	424918	R13982	Hs.169309	myelin-associated oligodendrocyte basic	3.3	5.3
	453431	AF094754	Hs.32973	glycine receptor, beta	3.3	4.6
	412453	R20205	Hs.75236	ESTs	3.3	3.3
65	450561	R49674	Hs.25909	ESTs	3.3	3.3
	415527	F11824		gb:HSC22D101 normalized infant brain cDN	3.3	3.3
	426968	U07616	Hs.173034	amphiphysin (Stiff-Mann syndrome with br	3.3	15.3
	427386	AW836261	Hs.6727	ESTs	3.3	3.3
	424001	W87883	Hs.137476	paternally expressed 10	3.2	5.4
70	439450	R51613	Hs.125304	ESTs	3.2	8.3
	442879	AF032922	Hs.8813	syntactin binding protein 3	3.2	3.2
	417284	N82889	Hs.107242	Homo sapiens cDNA FLJ12965 fs, clone NT	3.2	3.2
	410343	AA084273	Hs.76561	ESTs, Weakly similar to S47072 finger pr	3.2	3.2
	410909	AW898161	Hs.53112	ESTs, Moderately similar to ALU8_HUMAN A	3.2	12.5
75	453919	AW959912	Hs.7076	KIAA1705 protein	3.2	3.2
	424087	N59333	Hs.143434	contactin 1	3.1	3.1
	428963	AW382682	Hs.258208	Homo sapiens, clone MGC:15606, mRNA, com	3.1	3.3
	419852	AW503756	Hs.286184	hypothetical protein dJ55102.5	3.1	4.1
	422234	AF119818	Hs.113287	discs, large (Drosophila) homolog-associ	3.1	3.1
80	423829	R44107	Hs.240905	ESTs	3.1	4.4
	443297	A1049864	Hs.133029	ESTs	3.1	3.1
	453302	NM_000838	Hs.32945	glutamate receptor, metabotropic 1	3.1	4.6
	405819			NM_002578: Homo sapiens p21 (CDKN1A)-acti	3.1	13.5
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	3.0	3.0

	447673	AI823987	Hs.182285	ESTs	3.0	3.0
	433670	AA604405		gb:mo87h09.s1 NCI_CGAP_AA1 Homo sapiens	3.0	3.9
	450757	BE081050	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	3.0	3.2
	424724	T06532	Hs.287709	Homo sapiens cDNA: FLJ22674 fs, clone M	3.0	3.0
5	433315	R96754	Hs.239706	GRB2-associated binding protein 1	3.0	3.1
	451032	W03692	Hs.323079	Homo sapiens mRNA; cDNA DKFZp564P116 (fr	3.0	4.9
	423346	AI267677	Hs.127416	synaptotagmin 1	3.0	20.1
	439274	AF086092	Hs.48372	ESTs	3.0	18.3
10	425649	U00930	Hs.158540	UDP glycosyltransferase 8 (UDP-galactose	2.9	38.6
	441869	NM_003947	Hs.6004	huntingtin-associated protein interactin	2.9	14.9
	407668	NM_000950	Hs.40637	proline-rich Gla (G-carboxyglutamic acid	2.9	3.3
	410765	AI694972	Hs.66180	nucleosome assembly protein 1-like 2	2.9	8.0
	428001	H97428	Hs.219907	ESTs, Moderately similar to Transforming	2.8	5.9
	448533	AL119710	Hs.21365	nucleosome assembly protein 1-like 3	2.8	9.6
15	425130	AA448208	Hs.99163	ESTs	2.8	3.1
	408554	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	2.8	3.7
	452238	F01811	Hs.345757	ESTs	2.8	3.8
	446544	AI631932	Hs.7047	ESTs, Weakly similar to Unknown [H.saple	2.8	12.4
	433803	AI823593	Hs.27688	ESTs	2.8	4.1
20	407728	AW071502	Hs.175931	ESTs	2.7	10.2
	414931	AK000342	Hs.77646	Homo sapiens mRNA; cDNA DKFZp761M0223 (I	2.7	3.4
	410711	AB002316	Hs.65746	KIAA0318 protein	2.7	6.1
	452738	AL133800	Hs.7086	hypothetical protein MGC12435	2.7	3.5
25	451516	AI800515	Hs.12024	ESTs	2.7	6.3
	454053	AW023006	Hs.27172	ESTs, Moderately similar to PC4259 ferri	2.7	3.6
	450474	AW872844	Hs.117494	ESTs	2.7	7.2
	422414	AW875237	Hs.13701	ESTs	2.7	5.3
	428186	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	2.7	3.9
	431342	AW971018	Hs.21659	ESTs	2.7	8.0
30	423449	AI497900	Hs.33067	ESTs	2.6	14.5
	427283	AL119796	Hs.174185	ectonucleotide pyrophosphatase/phosphodi	2.6	3.0
	426919	AL041228		ELAV (embryonic lethal, abnormal vision,	2.6	9.0
	437117	AL049256	Hs.122593	ESTs	2.6	3.8
	422491	AA338548	Hs.117546	neurostatin	2.6	3.6
35	438068	AI927209	Hs.306210	Homo sapiens cDNA: FLJ23133 fs, clone L	2.6	5.1
	432809	AA565509	Hs.131703	ESTs	2.5	9.9
	433551	AI985544	Hs.12450	protocadherin 9	2.5	18.1
	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	2.5	43.2
40	417417	F05745	Hs.89512	ATPase, Ca transporting, plasma membrane	2.5	17.1
	413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	2.5	5.7
	448902	Z45998	Hs.22543	Homo sapiens mRNA; cDNA DKFZp761I1912 (I	2.5	21.8
	442910	AI365130	Hs.11307	ESTs, Weakly similar to T19326 hypotheri	2.5	14.5
	423135	N67655	Hs.26411	ESTs	2.5	8.2
	452311	AW304029	Hs.252744	ESTs	2.5	3.5
45	418940	H17739	Hs.288513	Human DNA sequence from clone RPS-899C14	2.5	7.0
	432882	NM_013257	Hs.279696	serum/glucocorticoid regulated kinase-II	2.5	4.2
	422411	AW749443	Hs.22511	ESTs	2.5	12.0
	451386	AB029006	Hs.26334	spastic paraplegia 4 (autosomal dominant	2.4	3.1
50	404819			NM_002688*Homo sapiens peanut (Drosophi	2.4	5.8
	429656	X05608	Hs.211584	neurofilament, light polypeptide (58kD)	2.4	13.1
	431988	AC002302	Hs.77202	protein kinase C, beta 1	2.4	10.5
	411379	AI816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	2.4	11.2
	422980	AB4569	Hs.76722	CCAAT/enhancer binding protein (C/EBP),	2.4	45.2
55	429859	NM_007050	Hs.225952	protein tyrosine phosphatase, receptor I	2.4	5.1
	430287	AW182459	Hs.125759	ESTs, Weakly similar to LEU5, HUMAN LEUKE	2.4	7.6
	422890	Z43784		ankyrin 3, node of Ranvier (ankyrin G)	2.4	3.6
	427658	H81387	Hs.30868	nogo receptor	2.4	3.0
	446100	AW967109	Hs.13804	hypothetical protein dJ462023.2	2.3	3.6
60	412266	N59006	Hs.26133	ESTs	2.3	30.9
	435059	Z45270	Hs.235873	hypothetical protein FLJ22672	2.3	4.8
	420173	AA256151	Hs.22999	ESTs	2.3	4.1
	452371	R40990	Hs.21658	ESTs	2.3	3.3
	430456	AA314998	Hs.241503	hypothetical protein	2.3	4.7
	409953	AA332277	Hs.57691	cadherin 18, type 2	2.3	5.5
65	429006	AA443143	Hs.50929	hypothetical protein FLJ13842	2.3	6.6
	445194	AI215667	Hs.175044	ESTs	2.3	3.1
	428392	H10233	Hs.2265	secretory granule, neuroendocrine protei	2.3	42.3
	434460	AA478486	Hs.3852	KIAA0368 protein	2.3	4.8
70	416490	AF090116	Hs.79348	regulator of G-protein signaling 7	2.3	12.5
	437924	AI935344	Hs.164118	ESTs, Weakly similar to SLS1_HUMAN SODIU	2.3	3.2
	418738	AW388633	Hs.6682	solute carrier family 7, (cationic amino	2.2	16.9
	424945	AI221919		hypothetical protein FLJ10582	2.2	30.5
	416530	U62801	Hs.79361	kallikrein 6 (neurosin, zyme)	2.2	4.4
	422927	AW247388	Hs.301423	calcium binding protein 1 (calbrain)	2.2	3.0
75	438831	BE263273	Hs.6439	synapsin II	2.2	3.4
	449078	AK001256	Hs.22975	KIAA1576 protein	2.2	16.1
	410631	AA086469	Hs.47171	ESTs	2.2	5.8
	419271	N34901	Hs.238532	ESTs	2.2	7.5
	452752	AW044058	Hs.33578	KIAA0820 protein	2.2	13.4
80	446574	AI310135	Hs.335933	ESTs	2.2	3.5
	452106	AI141031	Hs.21342	ESTs	2.2	3.4
	415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	2.2	28.9
	444458	BE041526	Hs.31746	hypothetical protein DKFZp547F072	2.2	7.7

5	446692	Z44514	Hs.198416	Homo sapiens mRNA for KIAA1763 protein, ESTs	2.2	33.0
	412788	AA120960	Hs.96423	hypothetical protein FLJ23033	2.2	8.5
	419103	Z40229	Hs.148680	calcyon; D1 dopamine receptor-interactin	2.2	8.4
	424474	AA308883	Hs.210852	T-box, brain, 1	2.2	3.6
	451783	R42554	Hs.132458	ESTs	2.1	11.2
	434792	AA649253	Hs.217112	ESTs	2.1	3.8
	424922	BE386547	Hs.4273	hypothetical protein MGC10825	2.1	3.7
	455364	H72176	Hs.324784	hypothetical protein FLJ13159	2.1	4.9
10	413988	M81883	Hs.246107	glutamate decarboxylase 1 (brain, 67kD)	2.1	5.1
	452744	AJ267652	Hs.34650	Homo sapiens mRNA; cDNA DKF Zp434E082 (tr	2.1	3.6
	443150	AJ034467	Hs.32452	ESTs	2.1	7.6
	453220	AB033089	Hs.94653	Homo sapiens mRNA for KIAA1263 protein,	2.1	19.9
	420050	AL118615	Hs.166161	neurochondrin	2.1	6.5
15	408449	NM_004408	Hs.130489	dynamitin 1	2.1	5.1
	423841	AL137256	Hs.239706	ATPase, aminophospholipid transporter-5	2.1	6.2
	430347	NM_002039	Hs.23740	GRB2-associated binding protein 1	2.1	3.2
	449568	AL157479	Hs.9788	KIAA1598 protein	2.1	3.6
	412675	AA460716	Hs.119357	hypothetical protein MGC10924 similar to	2.1	3.3
20	429550	AW293055	Hs.144006	ESTs	2.1	6.4
	446782	AJ653048	Hs.24886	ESTs	2.1	9.0
	453924	R49295	Hs.303527	ESTs	2.1	13.4
	437948	AA772920	Hs.301663	ESTs	2.1	24.8
	451952	AL120173	Hs.172753	ESTs	2.0	19.2
25	453754	AW972580	Hs.21958	ESTs	2.0	3.4
	448765	R15337	Hs.5542	Homo sapiens mRNA; cDNA DKFZp547D086 (tr	2.0	3.9
	447163	AW292770	Hs.20887	DnaJ (Hsp40) homolog, subfamily C, membe	2.0	3.4
	448299	AA497044	Hs.71346	hypothetical protein FLJ10392	2.0	11.5
	411668	AF106564	Hs.1780	neurofilament 3 (150kD medium)	2.0	6.6
30	424458	M29273	Hs.3786	myelin associated glycoprotein	2.0	10.1
	434277	X77748	Hs.7006	glutamate receptor, metabotropic 3	2.0	28.5
	440152	AB002376	Hs.22542	KIAA0378 protein	2.0	14.2
	429956	AJ374651	Hs.273740	ESTs	2.0	3.2
	450590	AJ701507	Hs.119302	ESTs	2.0	3.8
35	429024	AJ652297	Hs.287425	complement-c1q tumor necrosis factor-rel	2.0	3.7
	430643	AW970065	Hs.78748	MEGF10 protein	2.0	4.1
	415734	NM_014747	Hs.63970	KIAA0237 gene product	2.0	27.4
	419757	AA773820	Hs.103042	ESTs	2.0	3.3
40	421264	AL039123	Hs.159460	microtubule-associated protein 1B	2.0	23.8
	439607	BE540565	Hs.24889	ESTs	2.0	5.6
	435624	AF218942	Hs.154679	formin 2	2.0	12.2
	425121	AJ797511	Hs.306389	synaptotagmin I	2.0	3.9
	431677	AK000496	Hs.31961	hypothetical protein FLJ20489	2.0	3.1
	442593	R39804	Hs.302689	ESTs	2.0	6.7
45	410366	AJ267589	Hs.170808	hypothetical protein	2.0	10.4
	426575	M74826	Hs.30881	glutamate decarboxylase 2 (pancreatic is	2.0	4.6
	452856	AF034799	Hs.112198	protein tyrosine phosphatase, receptor I	2.0	10.7
	437380	AL359577	Hs.153648	Homo sapiens mRNA; cDNA DKFZp547M073 (tr	2.0	3.8
	424893	AW295112	Hs.273758	Homo sapiens cDNA FLJ13303 fis, clone OV	2.0	3.8
50	436734	AJ937612	Hs.118140	hypothetical protein FLJ23112	2.0	4.7
	422544	AB018259	Hs.6932	KIAA0716 gene product	2.0	11.8
	440105	AA694010	Hs.159412	Homo sapiens clone Z3809 mRNA sequence	2.0	8.2
	425741	AF052152	Hs.94116	Homo sapiens clone 24628 mRNA sequence	2.0	6.5
	450310	N62341		ESTs	2.0	3.6
55	TABLE 20B:					
	Key:	Unique Eos probeset identifier number				
	CAT number:	Gene cluster number				
	Accession:	Genbank accession numbers				
60	Key	CAT Number	Accession			
	415527	1539393_1	F11624 Z43212 H08936 R56332 H09256 R52303 R13075			
	415666	1543492_1	H72693 R08673 H72694 F20990 R08580			
	418866	179788_1	T65754 AA229857 AA229658			
65	422890	222707_1	Z43784 R13382 AW572911 AA449369 H17037 R19603 A1632565 AW004030 BE502530 Z25032 AA805324 AA449241 AJ651825 AJ264863 AW196918			
			AA948267 AJ953735 AJ263703 AA319159 AW984438 AJ903440 AW594171 AJ857447 AW204071 AW956110 C15616 D81142 H17038 AW162343			
			T87230 AJ3			
	422949	223184_1	AA319435 N56456 AA319377 AW961532 T48452 AA894424			
	424945	245223_1	AJ221919 Z19967 AA348780 AW964077 AW166028 BE540193 N94800 AA452368 N99604 A1341345 AW298800 AA724961 AA931158 AJ741227			
70			AJ806660 AJ982626 D81263 D53937 D52496 AA974487 AW043854 N50483 Z39997 AJ492961 AJ361526 F04002 AA452141 T23551 AJ472655			
			AJ193667 AJ341			
	426919	273507_1	AL041228 D82004 D61361 AJ203314 AJ990307 AW900295 AJ018308 AW087473 AW183530 AA393346 H50055 AA935601			
	433670	372721_1	AA604405 BE062234 AW748386			
	433921	377350_1	AA618174 AJ114549 R36464 R36465			
75	433940	37787_1	H05129 N63433 A1651350 AA984734 AJ368716 N40915 AJ989705 F09042 T03905 R88588 AF112220			
	436773	426857_1	AW078829 AJ857375 N64357 AA731069			
	446692	689623_1	Z44514 AJ352097 AJ803984 AW235923 AW196558 AJ954637 AJ336983			
80	TABLE 20C:					
	Key:	Unique number corresponding to an Eos probeset				
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA				
		sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.				
	Strand:	Indicates DNA strand from which exons were predicted.				
	NT_position:	Indicates nucleotide positions of predicted exons.				



	Pkey	Ref	Strand	NL_position
	400844	9188605	Plus	24746-24872,25035-25204
	404819	4678240	Plus	16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578
5	405560	183148	Plus	5495-5655,6077-6241,6495-6692
	405819	4007557	Plus	2830-2967
	406311	9211559	Minus	137114-139033

10 TABLE 21A: ABOUT 410 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA MULTIFORMA COMPARED TO NORMAL ADULT CNS  
 Table 21A lists about 410 genes significantly down-regulated in glioblastoma multiforma (GBM) compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" GBM was greater than or equal to 2. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" GBM level was set to the 95<sup>th</sup> percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

15 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of CNS to GLIOBLASTOMA MULTIFORMA

	Pkey	ExAccn	UnigenelD	Unigene Title	R1
	417275	XG3578	Hs.295449	parvalbumin	18.6
	428505	AL035461	Hs.2281	chromogranin B (secretogranin 1)	13.8
25	415672	N53097	Hs.193579	ESTs	13.5
	459080	AW192083	Hs.290855	ESTs	12.9
	432298	AL118812	Hs.274293	Homo sapiens mRNA; cDNA DKFZp761G1111 (f	11.7
	400302	N48056	Hs.1915	folate hydrolase (prostate-specific memb	10.9
	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	10.1
30	424645	NM_014682	Hs.151449	KIAA0535 gene product	8.2
	415274	AF001548	Hs.78344	myosin, heavy polypeptide 11, smooth mus	7.5
	413324	V00571	Hs.75294	corticotropin releasing hormone	7.5
	417167	AW206437	Hs.4290	ESTs	7.3
	422728	AW937826	Hs.103262	ESTs, Weakly similar to ZN91_HUMAN ZINC	6.8
35	410330	AW023630	Hs.159425	ESTs	6.5
	450590	AI701507	Hs.273740	ESTs	6.5
	453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	6.5
	454076	AW204712	Hs.61957	ESTs	6.3
	419956	AL137939	Hs.40096	ESTs	6.3
40	416851	AW963951	Hs.85618	ESTs	6.2
	428874	W32133	Hs.194366	transferrin (prealbumin, amyloidosis t	6.0
	409743	N48721	Hs.183506	hypothetical protein FLJ14213	5.9
	449078	AK001256	Hs.22975	KIAA1576 protein	5.6
	448072	AI459306	Hs.24908	ESTs	5.6
45	412622	AW664708	Hs.171959	ESTs	5.6
	428414	AL049980	Hs.184216	DKFZP564C152 protein	5.5
	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	5.5
	411498	NM_014210	Hs.70499	ecotropic viral integration site 2A	5.4
	453344	BE349075	Hs.44571	ESTs	5.4
50	441790	AW294909	Hs.132208	ESTs	5.3
	443037	AW500305	Hs.8906	syntrophin 7	5.3
	445529	H14421	Hs.180513	ATP-binding cassette, sub-family A (ABC1	5.2
	447750	AI422234	Hs.143434	contactin 1	5.2
	444409	AI792140	Hs.49265	ESTs	5.2
55	409031	AA376836	Hs.288856	ESTs	5.1
	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	5.0
	452022	AW072330	Hs.293875	ESTs	4.9
	408428	NM_014787	Hs.44896	OnaJ (Hsp40) homolog, subfamily B, membe	4.8
	444922	AI921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL	4.8
60	443622	AI911527	Hs.11805	ESTs	4.8
	442023	AI187878	Hs.144549	ESTs	4.7
	445618	H78667	Hs.237642	Homo sapiens cDNA FLJ12052 fs, clone HE	4.6
	429611	AI889077	Hs.211388	Homo sapiens BAC clone CTB-60N22 from 7q	4.5
	414290	AI568801	Hs.71721	ESTs	4.4
65	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	4.4
	428508	BE252383	Hs.184668	SBB131 protein	4.4
	425649	U30930	Hs.158540	UDP glycosyltransferase 8 (UDP-galactose	4.3
	459247	N48243	Hs.110373	ESTs, Highly similar to T42626 secreted	4.3
	434064	AL049045	Hs.180758	hypothetical protein PRO0082	4.3
70	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	4.3
	416133	NM_001683	Hs.89512	ATPase, Ca transporting, plasma membrane	4.3
	426471	M22440	Hs.170009	transforming growth factor, alpha	4.2
	409231	AA446644	Hs.692	GA733-2 antigen; epithelial glycoprotein	4.2
	448958	AB020651	Hs.22653	KIAA0844 protein	4.2
75	410657	AF063228	Hs.65248	dynein, cytoplasmic, intermediate polype	4.1
	447138	AI439112	Hs.93828	ESTs, Weakly similar to 2109260A B cell	4.1
	440736	D56919	Hs.265848	myomegalin	4.1
	407245	X90568	Hs.172004	titin	4.1
	441976	AA428403	Hs.106131	ESTs	4.1
80	450642	R39773	Hs.7130	copine IV	4.1
	432799	NM_016161	Hs.278960	alpha-1,4-N-acetylglucosaminyltransferas	4.0
	428465	AW970978	Hs.293653	ESTs	4.0
	407868	NM_000950	Hs.40637	proline-rich Glu (G-carboxyglutamic acid	4.0

5	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypotheti	4.0
	429470	AJ878901	Hs.203862	guanine nucleotide binding protein (G pr	4.0
	415665	H72693		gb:yu03c11.1 Soares fetal liver spleen	3.9
	407888	N47760	Hs.285107	hypothetical protein FLJ13397	3.9
	427051	AB032971	Hs.173392	KIAA1145 protein	3.9
	430261	AA305127	Hs.237225	hypothetical protein HT023	3.8
	440624	AF017987	Hs.7306	secreted frizzled-related protein 1	3.8
	431668	AW969610	Hs.151179	ESTs	3.8
	446692	Z44514		Homo sapiens mRNA for KIAA1763 protein,	3.8
10	408739	W01556	Hs.238797	ESTs, Moderately similar to I38022 hypot	3.8
	426716	NM_006379	Hs.171921	sema domain, immunoglobulin domain (Ig),	3.7
	450103	R08665	Hs.17244	hypothetical protein FLJ13605	3.7
	426775	AA384564	Hs.3628	ESTs	3.7
15	403469			Target Exon	3.7
	450181	H05254	Hs.201198	ESTs	3.7
	438202	AW169287	Hs.22588	ESTs	3.7
	445279	R41900	Hs.22245	ESTs	3.7
	422546	AB007969	Hs.301478	KIAA0500 protein	3.6
	435712	AA694607	Hs.176956	ESTs	3.6
20	417820	R02530	Hs.191198	ESTs	3.6
	421952	AA300900	Hs.98849	ESTs, Moderately similar to AF161511 1 H	3.6
	453655	AW960427	Hs.342874	transforming growth factor, beta recepto	3.6
	426365	AA376667	Hs.10283	RNA binding motif protein 88	3.6
25	416982	J05401	Hs.80691	creatine kinase, mitochondrial 2 (sarcos	3.6
	438086	AA336519	Hs.83623	nuclear receptor subfamily 1, group 1, m	3.6
	424704	AI263293	Hs.152096	cytochrome P450, subfamily 11J (arachido	3.6
	414631	AW970130	Hs.65406	ESTs	3.6
	453698	AA037615	Hs.42746	ESTs	3.5
30	438704	AI435060	Hs.32825	ESTs	3.5
	437073	AI885608	Hs.94122	ESTs	3.5
	434460	AA478486	Hs.3852	KIAA0368 protein	3.5
	414541	BE293116	Hs.76392	aldehyde dehydrogenase 1 family, member	3.5
	423665	BE167153	Hs.24380	ESTs	3.5
35	446390	AA233393	Hs.14992	hypothetical protein FLJ11151	3.5
	441264	AA927170	Hs.23290	ESTs	3.5
	433629	R13140	Hs.13359	ESTs	3.5
	411811	AW864370		gb:PM4-SN0016-100500-004-h09 SN0016 Homo	3.4
	410140	AL134435	Hs.247837	neurexin 3	3.4
40	415114	D60468	Hs.94181	ESTs	3.4
	455649	BE065051		gb:RC1-BT0313-110500-017-c04 BT0313 Homo	3.4
	433670	AA604405		gb:nc087n09.s1 NCI_CGAP_AA1 Homo sapiens	3.4
	417175	R44558	Hs.94002	ESTs	3.4
	427176	AW381569	Hs.40334	ESTs	3.4
45	448519	AW175665	Hs.278695	Homo sapiens prostein mRNA, complete cds	3.3
	457012	R41480	Hs.302754	ESTs	3.3
	405354			CX000321:gi 5671578 ref NP_031518.1  ari	3.3
	445872	AI681573	Hs.288671	Homo sapiens cDNA FLJ11997 fs, clone HE	3.3
	433803	AI823593	Hs.27688	ESTs	3.3
50	449017	AW002425	Hs.224142	ESTs	3.3
	414545	AA149287	Hs.76605	ESTs	3.3
	409010	AI648675	Hs.103441	Homo sapiens, Similar to RIKEN cDNA 1700	3.3
	426158	NM_001982	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	3.3
	422411	AW749443	Hs.22511	ESTs	3.3
55	428850	AA934975	Hs.185078	ESTs	3.2
	406922	S70284	Hs.119597	gb:staroyl-CoA desaturase [human, adipo	3.2
	429556	AW139399	Hs.98988	ESTs	3.2
	434104	AF116691	Hs.116459	hypothetical protein PRO2198	3.2
	427229	AI799751	Hs.5635	ESTs	3.2
60	444458	BE041526	Hs.31746	hypothetical protein DKFZp547F072	3.2
	433328	AW298159	Hs.23644	ESTs, Weakly similar to S65824 reverse t	3.2
	412786	AW900654	Hs.285729	ESTs, Weakly similar to unnamed protein	3.2
	440808	AK001339	Hs.7432	hypothetical protein FLJ10477	3.2
	442117	AW664964	Hs.128899	ESTs; hypothetical protein for IMAGE:447	3.1
65	429876	AB028977	Hs.225974	KIAA1054 protein	3.1
	450757	BE081050	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	3.1
	414327	BE408145	Hs.185254	ESTs, Weakly similar to T24435 hypotheti	3.1
	459399	BE407712	Hs.153998	creatine kinase, mitochondrial 1 (ubiqui	3.1
	433582	BE548749	Hs.148016	ESTs	3.0
	452752	AW044058	Hs.33578	KIAA0820 protein	3.0
70	439165	AA029517	Hs.95162	KCNQ1 overlapping transcript 1	3.0
	409403	AA668224	Hs.6634	Homo sapiens cDNA: FLJ22547 fs, clone H	3.0
	422414	AW875237	Hs.13701	ESTs	3.0
	407173	T64349		gb:yc10d08.s1 Stratagene lung (937210) H	3.0
	448583	NM_015239	Hs.21542	KIAA1035 protein	3.0
75	429043	AI824977	Hs.145319	ESTs	3.0
	452990	AA887428	Hs.246970	mitogen-activated protein kinase kinase	3.0
	412258	AA376768	Hs.324841	hypothetical protein FLJ22622	3.0
	429968	AA322503	Hs.227011	G-substrate	2.9
	434348	BE393191	Hs.181795	putative b,b-carotene-9',10'-dioxygenase	2.9
80	427115	AW972853	Hs.112237	ESTs	2.9
	430638	AB032435	Hs.242821	differentiation-associated Na-dependent	2.9
	449561	AI022240	Hs.17924	ESTs, Moderately similar to ALU1_HUMAN A	2.9
	405403			Target Exon	2.9

	452197	AW023595	Hs.232048	ESTs	2.9
	437357	AL359559	Hs.331666	Homo sapiens mRNA; cDNA DKFZp762O2215 (f	2.9
	436427	AJ344378	Hs.143399	ESTs	2.9
	417787	R14948	Hs.23883	ESTs	2.9
5	439272	AA832474	Hs.25851	ESTs	2.9
	454247	AJ243950	Hs.46735	deafness locus associated putative guani	2.9
	415839	R40611	Hs.94694	ESTs	2.9
	408814	N62499	Hs.176227	hypothetical protein FLJ111155	2.9
10	408468	AI909712	Hs.93837	phosphatidylinositol transfer protein, m	2.9
	431304	BE157283		gb:RC4-HT0373-130200-011-a03 HT0373 Homo	2.9
	410240	AL157424	Hs.61289	synaptotagmin 2	2.8
	444783	AK001468	Hs.62180	enilin (Drosophila Scraps homolog), act	2.8
	408438	AB011180	Hs.100960	KIAA0608 protein	2.8
	458793	N80159	Hs.121849	microtubule-associated proteins 1A/1B li	2.8
15	429788	U87791	Hs.121040	HBS1 (S. cerevisiae)-like	2.8
	424264	D80400	Hs.239388	Human DNA sequence from clone RP1-304B14	2.8
	433109	N58907	Hs.162430	EST	2.8
	427974	BE093023	Hs.188767	ESTs	2.8
	432266	AK000385	Hs.274222	hypothetical protein FLJ20378	2.8
20	414764	AW013887	Hs.31522	ESTs	2.8
	411918	AW876354		gb:PM4-PT0019-141299-009-F08 PT0019 Homo	2.8
	404563			Target Exon	2.8
	446468	AJ765890	Hs.16341	MAVD binding protein	2.8
25	444755	AA431791	Hs.113823	CipX (caseinolytic protease X, E. coli)	2.7
	445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	2.7
	427283	AL119796	Hs.174185	ectonucleotide pyrophosphatase/phosphodi	2.7
	400138			Eos Control	2.7
	458676	AI692484	Hs.202263	ESTs	2.7
	459697	AA406062	Hs.98002	ESTs	2.7
30	444420	AI148157	Hs.148766	ESTs	2.7
	430371	D87466	Hs.240112	KIAA0276 protein	2.7
	449117	AW449310	Hs.210262	ESTs, Weakly similar to HSS2_HUMAN HEPAR	2.7
	424994	AW954525		gb:EST366595 MAGE resequences, MAGC Homo	2.7
	400339	X57131	Hs.248209	H2A histone family, member F, pseudogene	2.7
35	417494	AI369494	Hs.222137	ESTs	2.7
	427166	AA431576	Hs.99154	ESTs	2.7
	404746			CX000138":gi7512767[pir]T12477 hypothe	2.7
	411361	AW839073		gb:CM2-LT0066-030100-109-d06 LT0066 Homo	2.7
40	428358	AA993222	Hs.101915	Stargardt disease 3 (autosomal dominant)	2.7
	406625	Y13647	Hs.119597	stearoyl-CoA desaturase (delta-9-desatur	2.7
	416101	R24854	Hs.268806	ESTs	2.7
	404606			Target Exon	2.7
	433921	AA618174		gb:nq14f01.s1 NCI_CGAP_Thy1 Homo sapiens	2.7
45	414272	AI651603	Hs.46988	ESTs	2.7
	418047	R37633	Hs.4847	ESTs	2.7
	421089	AB037771	Hs.101799	KIAA1350 protein	2.7
	412244	AW948175		gb:RCD-MT0013-280300-021-c10 MT0013 Homo	2.6
	432434	AL161977	Hs.2994	PCTAIRE protein kinase 3	2.6
	424153	AA451737	Hs.141496	MAGE-like 2	2.6
50	427189	H82453	Hs.5635	ESTs	2.6
	454454	AW812264	Hs.131705	ESTs	2.6
	426747	AA535210	Hs.171995	kallikrein 3, (prostate specific antigen	2.6
	456791	H05202	Hs.133968	FGF receptor activating protein 1	2.6
	405715			ENSP00000005198":Mixed lineage kinase ML	2.6
55	425494	N55540	Hs.78026	ESTs, Weakly similar to similar to ankyr	2.6
	430865	AI073424	Hs.5232	HSPC125 protein	2.6
	435767	H73505	Hs.117874	ESTs	2.6
	410119	F07841	Hs.13926	ESTs	2.6
	432146	AW081072	Hs.115960	KIAA0939 protein	2.6
60	448871	BE816709	Hs.159265	kruppel-related zinc finger protein hckr	2.6
	414516	AI307802	Hs.135560	ESTs, Weakly similar to T43458 hypothesi	2.6
	429477	AI275514	Hs.6658	ESTs	2.5
	400269			Eos Control	2.5
65	443992	AW022228	Hs.329222	ESTs	2.5
	451926	AW134519	Hs.96125	Homo sapiens, Similar to clone FLB3816,	2.5
	435145	AI277259	Hs.116631	ESTs	2.5
	420309	AW043637	Hs.21766	ESTs, Weakly similar to ALUS_HUMAN ALU S	2.5
	449709	BE410592	Hs.23918	hypothetical protein PP5395	2.5
	416530	U62801	Hs.79361	kallikrein 6 (neurosin, zyme)	2.5
70	411678	AI907114	Hs.71465	squalene epoxidase	2.5
	408119	W26213	Hs.101672	ESTs, Weakly similar to T00331 hypothesi	2.5
	436624	T64297		fatty acid binding protein 1, liver	2.5
	458268	AA428403	Hs.106131	ESTs	2.5
	451336	AI264843	Hs.3610	ESTs	2.5
75	456924	AI631510	Hs.196956	ESTs, Highly similar to match to EST AA3	2.5
	455040	AW852286		gb:QVO-CT0225-100400-187-d08 CT0225 Homo	2.5
	420033	D59502	Hs.292590	ESTs	2.5
	448786	BE048842	Hs.179075	Homo sapiens cDNA FLJ11881 fts, clone ME	2.5
	432251	AW972983	Hs.232165	polycythemia rubra vera 1; cell surface	2.5
80	408206	AF041853	Hs.43670	kinesin family member 3A	2.5
	440205	T86950	Hs.105448	ESTs, Weakly similar to B34087 hypothesi	2.5
	442138	AAA45973	Hs.13303	Homo sapiens cDNA: FLJ21784 fts, clone H	2.5
	420912	AW853156	Hs.90787	ESTs	2.4

	439180	AI393742	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	2.4
	421025	AW958975	Hs.29397	Homo sapiens cDNA FLJ13226 fis, clone Ov	2.4
	439973	AJ733308	Hs.124563	ESTs	2.4
	446847	T51454	Hs.82845	Homo sapiens cDNA: FLJ21930 fis, clone H	2.4
5	414672	AJ218038	Hs.48504	ESTs, Moderately similar to ALUS_HUMAN A	2.4
	451522	BE565817	Hs.26498	hypothetical protein FLJ21657	2.4
	433068	NM_006456	Hs.288215	sialyltransferase	2.4
	446620	AA128808	Hs.179902	transporter-like protein	2.4
	423803	NM_005709	Hs.132945	PDZ-73 protein	2.4
10	407978	AW385129	Hs.41717	phosphodiesterase 1A, calmodulin-depende	2.4
	425907	AA365752	Hs.155965	ESTs	2.4
	433819	AW511097	Hs.112765	ESTs	2.4
	446066	AJ343931	Hs.149383	ESTs	2.4
15	430573	AA744550	Hs.136345	ESTs	2.4
	444992	R37658	Hs.21375	ESTs	2.4
	434975	AA657884	Hs.314413	ESTs	2.4
	458227	Z40670	Hs.181340	ESTs	2.4
	443244	AJ457235	Hs.156479	ESTs	2.4
	432408	N39127		ESTs, Weakly similar to A46010 X-linked	2.4
20	401600	BE247275		US snRNP-specific protein, 116 kD	2.3
	419066	Z98492	Hs.6975	PRO1073 protein	2.3
	424823	NM_006226	Hs.153322	phospholipase C, epsilon	2.3
	402124			NM_031891:Homo sapiens cadherin 20, type	2.3
25	416678	N80448	Hs.269106	ESTs	2.3
	444897	AW137098	Hs.144857	ESTs	2.3
	425111	BE018485	Hs.30977	ESTs, Weakly similar to B34087 hypotheti	2.3
	400538			NM_000681*:Homo sapiens adrenergic, alph	2.3
	427544	AJ767152	Hs.181400	ESTs, Weakly similar to I78885 serine/th	2.3
30	459511	AJ142379		gb:qq64c01.r1 Soares_testis_NHT Homo sap	2.3
	415111	R39039	Hs.279041	EST	2.3
	433331	AJ738815	Hs.117323	ESTs	2.3
	440293	AJ004193	Hs.22123	ESTs	2.3
	411770	NM_014278	Hs.71992	heat shock protein (hsp110 family)	2.3
35	416964	D87467	Hs.80620	guanine nucleotide exchange factor for R	2.3
	419388	AA236867		ESTs, Weakly similar to I38022 hypotheti	2.3
	402493	AJ743260		mannosidase, alpha, class 1A, member 1	2.3
	401783			NM_003771*:Homo sapiens keratin, hair, a	2.3
	420548	AA278248	Hs.920	ESTs	2.3
40	419763	AJ039691	Hs.127486	ESTs	2.3
	421750	AJ000768	Hs.107872	hypothetical protein FLJ20761	2.3
	406023			Target Exon	2.3
	454024	AA993527	Hs.293907	hypothetical protein FLJ23403	2.3
	401586			Target Exon	2.3
	404091			Target Exon	2.3
45	456773	AJ038192	Hs.129764	EGF-like repeats and discoidin like do	2.3
	414106	BE300325	Hs.77135	RNA binding protein	2.3
	454288	BE222648	Hs.241432	ESTs, Highly similar to c380A1.1b [H.sap	2.3
	441879	AJ521938	Hs.107149	novel protein similar to archaeal, yeast	2.3
50	424724	T06532	Hs.287709	Homo sapiens cDNA: FLJ22674 fis, clone H	2.3
	415692	N51935	Hs.47374	Homo sapiens cDNA FLJ13561 fis, clone PL	2.2
	416282	R86664	Hs.167257	brain link protein-1	2.2
	404659			ENSP00000239999*:HYPOTHETICAL 34.7 kDa P	2.2
	429956	AJ374651	Hs.22542	ESTs	2.2
55	429670	L01087	Hs.211593	protein kinase C, theta	2.2
	429655	U48959	Hs.211582	myosin, light polypeptide kinase	2.2
	458921	AJ682088	Hs.79375	holocarboxylase synthetase (biotin-prop	2.2
	436463	H06502	Hs.6656	ESTs	2.2
	408994	AW299520	Hs.43052	ESTs	2.2
60	413303	AW836130	Hs.75277	hypothetical protein FLJ13910	2.2
	418154	BE165866		nuclear receptor subfamily 1, group I, m	2.2
	418407	AL044818	Hs.84928	nuclear transcription factor Y, beta	2.2
	422907	AJ879263	Hs.77273	Human glucose transporter pseudogene	2.2
	446377	AW014022	Hs.170953	ESTs	2.2
65	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	2.2
	449714	AB033015	Hs.23941	KIAA1189 protein	2.2
	408480	AJ350337	Hs.164568	fibroblast growth factor 7 (keratinocyte	2.2
	410066	AL117664	Hs.58419	DKFZP586L2024 protein	2.2
	410912	AW810224		gb:MR4-ST0125-021199-017-e07 ST0125 Homo	2.2
70	447163	AW292770	Hs.5542	DnaJ (Hsp40) homolog, subfamily C, membe	2.2
	421709	AA159394	Hs.107056	CED-6 protein	2.2
	403728			Target Exon	2.2
	453359	AA448787	Hs.24872	ESTs	2.2
	411379	AJ816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	2.2
75	413427	U31120	Hs.845	interleukin 13	2.2
	409028	AB014513	Hs.49998	Z-band alternatively spliced PDZ-motif	2.2
	413924	AL119964	Hs.75616	selestin-1	2.2
	403453			Target Exon	2.2
	408068	AW148652	Hs.167398	ESTs	2.2
80	407819	R42185	Hs.102720	ESTs	2.2
	414203	BE262170	Hs.78629	ATPase, Na <sup>+</sup> transporting, beta 1 polypep	2.2
	448045	AJ297436	Hs.20166	prostate stem cell antigen	2.2
	449835	AW979300	Hs.293813	ESTs	2.2
	458547	AW204314	Hs.170784	ESTs	2.2

	414276	BE297862		gb:601174780F1 NIH_MGC_17 Homo sapiens c	2.2
	427493	H09037		Target CAT	2.2
	458441	AW842283	Hs.288232	cyclin I	2.1
5	410705	BE004107		gb:CM0-BN0102-150300-288-112 BN0102 Homo	2.1
	444647	H14718	Hs.11506	Human clone 23589 mRNA sequence	2.1
	405502			C7000609*:gi 528012 pir JAS3933 myosin I	2.1
	400818			Target Exon	2.1
	435059	Z45270	Hs.235873	hypothetical protein FLJ22672	2.1
10	426559	AB001914	Hs.170414	paired basic amino acid cleaving system	2.1
	445200	AA084460	Hs.12409	somatostatin	2.1
	453396	AW162768	Hs.22620	ESTs	2.1
	443819	AB033076	Hs.9873	likely homolog of rat kinase D-interact	2.1
	401929			C17001690:gb 5005701 ref NP_009099.1  AT	2.1
15	451032	W03692	Hs.323079	Homo sapiens mRNA; cDNA DKFZp564P116 (fr	2.1
	433862	D66960	Hs.3610	KIAA0205 gene product	2.1
	458694	F12832	Hs.3610	ESTs	2.1
	417063	N50515	Hs.45061	ESTs	2.1
	416935	AA190712		gb:zp87109.r1 Stratagene HeLa cell s3 93	2.1
20	414446	AA147534	Hs.142019	ESTs, Weakly similar to 1207289A reverse	2.1
	434681	AA642402	Hs.59142	ESTs	2.1
	413835	AJ272727	Hs.249163	fatty acid hydroxylase	2.1
	426137	AL040683	Hs.167031	DKFZP566D133 protein	2.1
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	2.1
25	454339	AW381980		gb:QV4-HT0316-091199-028-d05 HT0316 Homo	2.1
	407786	AA687538	Hs.38972	tetraspan 1	2.1
	421296	NM_002666	Hs.103253	perlepin	2.1
	444200	AA327113	Hs.149057	ESTs	2.1
	409339	AB020686	Hs.54037	ectonucleotide pyrophosphatase/phosphodi	2.1
30	418410	AA811441	Hs.107393	chromosome 3 open reading frame 4	2.1
	414759	AW295157	Hs.47587	ESTs	2.1
	449511	AJ436187	Hs.296261	guanine nucleotide binding protein (G pr	2.1
	451606	AA018791	Hs.7945	AIE-75 binding protein protein	2.1
	437924	AJ935344	Hs.164118	ESTs, Weakly similar to SLS1_HUMAN SODIU	2.1
35	449119	AJ631195	Hs.232193	ESTs	2.1
	431568	AW972316	Hs.283703	ESTs	2.1
	447932	AA837474	Hs.20021	vesicle-associated membrane protein 1 (s	2.1
	433516	AA595802	Hs.33410	ESTs, Weakly similar to T17279 hypotheti	2.1
	441987	AW452234	Hs.128293	ESTs	2.1
40	414055	AW818687	Hs.5366	hypothetical protein FLJ21522	2.1
	445066	BE178734	Hs.197422	ESTs	2.1
	455546	AW994075		gb:RC3-BN0036-090200-011-g06 BN0036 Homo	2.1
	413607	T64741		gb:yt48111.r1 Stratagene liver (937224)	2.1
	456401	W28146		gb:43f11 Human retina cDNA randomly prim	2.0
45	407341	AA918886	Hs.204918	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.0
	425055	AW961959	Hs.96940	ESTs	2.0
	426917	AA913814	Hs.172854	DKFZP586B0923 protein	2.0
	419647	AA348947	Hs.91816	hypothetical protein	2.0
	412266	N59006	Hs.26133	ESTs	2.0
50	449658	AJ964033	Hs.195730	ESTs, Weakly similar to CTXN RAT CORTEXI	2.0
	424505	AA446131	Hs.124918	KIAA1795 protein	2.0
	438219	AJ916151	Hs.257194	ESTs	2.0
	425068	AL048716	Hs.154387	KIAA0103 gene product	2.0
	412949	AJ471639	Hs.71913	ESTs	2.0
55	418866	T65754		gb:yc11c07.s1 Stratagene lung (937210) H	2.0
	445071	AJ280246	Hs.149504	ESTs	2.0
	456529	AF014643	Hs.100072	connexin46.6	2.0
	406475			C15000508*:gi 2558825 gb AAC53387.1  (AF	2.0
	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	2.0
60	431542	H83010	Hs.5740	ESTs	2.0
	452625	AA724771	Hs.61425	ESTs	2.0
	410378	R23324	Hs.41693	DnaJ (Hsp40) homolog, subfamily B, membe	2.0
	409767	AW501470		gb:UJ-HF-BP0p-ajd-b-03-0-UJ.r1 NIH_MGC_5	2.0
	446873	AJ554439	Hs.30724	ESTs	2.0
65	453938	AF082569	Hs.36794	D-type cyclin-interacting protein 1	2.0
	423605	AF047826	Hs.129887	cadherin 19, type 2	2.0
	420061	AW024937	Hs.29410	ESTs	2.0
	439559	AW364675	Hs.173921	ESTs, Weakly similar to 2109260A B cell	2.0
	449901	AJ674072		gb:wd15h01.x1 Soares_NFL_T_GBC_S1 Homo s	2.0
70	428304	AJ743177	Hs.98422	ESTs	2.0
	432278	AL137506	Hs.274256	hypothetical protein FLJ23563	2.0
	458480	AJ792298		p30 DBC protein	2.0
	404559			Target Exon	2.0
	445831	NM_006055	Hs.13351	LanC (bacterial antibiotic synthetase c	2.0
75	427523	BE242779	Hs.179526	upregulated by 1,25-dihydroxyvitamin D-3	2.0
	413055	AV655701	Hs.75183	cytochrome P450, subfamily IIE (ethanol-	2.0
	444904	AW452054	Hs.161139	ESTs	2.0
	443713	AJ082810	Hs.204934	ESTs	2.0
	448743	AB032962	Hs.21896	KIAA1136 protein	2.0
80	428186	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	2.0
	448770	AA326683	Hs.21992	likely ortholog of mouse variant polyade	2.0
	453994	BE180964	Hs.165590	ribosomal protein S13	2.0
	420290	AW977318	Hs.194480	ESTs	2.0
	431467	N71831	Hs.256398	Homo sapiens mRNA; cDNA DKFZp434E0528 (f	2.0

5	447965	AW292577	Hs.94445	ESTs	2.0
	423073	BE252922	Hs.123119	MAD (mothers against decapentaplegic, Dr	2.0
	459256	AW967468	Hs.99821	hypothetical protein FLJ14547	2.0
	411906	AW875765		gb:QV2-PT0012-020500-186-a08 PT0012 Homo	2.0
	441984	AB037763	Hs.8059	synaptotagmin IV	2.0
	437900	AI763301	Hs.107331	ESTs	2.0
	436092	AI345995	Hs.127383	ESTs	2.0
	416529	AW009370	Hs.115772	ESTs	2.0
10	414320	U13616	Hs.75893	ankyrin 3, node of Ranvier (ankyrin G)	2.0
	444749	AI190672	Hs.65926	ESTs	2.0
	446277	AI284218	Hs.159204	ESTs	2.0
	452550	AA026735	Hs.326048	Homo sapiens mRNA; cDNA DKFZp434M0420 (f	2.0
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	2.0
	409265	T78737	Hs.321062	ESTs	2.0
15	426736	AA431615	Hs.130722	ESTs	2.0
	447098	AI939409	Hs.157803	ESTs	2.0
	403582			Target Exon	2.0
20	TABLE 21B:				
	Pkey:	Unique Eos probeset identifier number			
	CAT number:	Gene cluster number			
	Accession:	Genbank accession numbers			
25	Pkey	CAT Number	Accession		
	409767	1154015_1	AW501470 AW502931 AW499500		
	410705	1217235_1	BE004107 BE004105 AW901093 AW797879 AW901094 AW797881 AW797880 BE004108		
	410912	1226543_1	AW810224 AW810337 AW810295 AW810333 AW810335 AW810296 AW816053		
	411361	1240611_1	AW839073 AW839234 AW839230 AW878302 AW839109 AW843897		
	411811	1259427_1	AW864370 AW864319 AW864504		
30	411906	1265204_1	AW875765 H50294 AW875444		
	411918	1265807_1	AW876354 AW876179 AW876318 AW876290 AW876234 AW876125 AW876199 AW876190		
	412244	1284692_1	AW948175 AW947637 AW902869 AW947537 AW947531 AW947532 AW947530		
	413607	1379911_1	T64741 BE158393 BE152805		
	414276	1432115_1	BE297862		
35	415666	1543492_1	H72693 R08673 H72694 F20990 R08580		
	416935	163179_1	AA190712 AA190665 AA252564		
	418154	17249_1	BE165866 BE165832 AA319621 AA401166 AI811901 H78857 X56199 R93797 AW896675 AA401072 AW374411 H52942 AW896685 AA348138		
40			AI399764 AA010244 W90159 N90874 AA339496 AW967136 W38705 AA029093 AW444847 BE175700 AV651656 AV651847 AA332039 AV649227		
			AV649164 AV649491 N87956 AA332262 BE001561 H75493 BE218742 AA333298 AA095633 AA091968 M78602 T05342 W17094 AA126501		
			AW374665 AI452905 AW316900 AI185080 AI202928 AI651843 AA693541 AI681019 AV658257 AV658133 BE045335 BE089546 AA300830 AA361376		
			BE218739 AW207622 AA765340 AW612733 BE348741 AI806054 AI871563 AA808652 AI500693 AW342032 AA147066		
	418866	179788_1	T65754 AA229857 AA229658		
	419386	184356_1	AA236867 AA237066 AA354236 AW957759 H08961		
45	424994	245786_1	AW954525 AI372685 AA349501 AI372687 H10564		
	427493	279541_2	H09037 AW974937 AA657521 H86138 H86513 H09016 AA404410 AA404454		
	431304	331286_1	BE157283 BE157287 AA502438		
	432408	346286_2	N39127 F20776 AI082691 AA865520 F36964 F33894		
	433670	372721_1	AA604405 BE062234 AW748386		
	433921	377350_1	AA618174 AI114549 R36464 R36465		
50	436624	4237_5	T64297 AA894931 NM_001443 M10050 AW843109 AI698516 T53219 T48785 T64166 AA706930 R29613 T55913 T56518 T64679 R29666 M10617		
			AI768596 AA101894 W90338 AI742193 AW752206 AA099433 T53220 AW082135 AW272775 T29562 T55862 AI343047 AI345671 T68235 T68121		
			AW842284		
	446692	689623_1	Z44514 AI352097 AI803984 AW235923 AW196558 AI954637 AI336983		
	449901	818599_1	AI674072 BE268487		
55	454339	1122972_1	AW381980 BE152244 BE152235 BE152238 BE152232		
	455040	1250028_1	AW852286 AW851934 AW852096 AW852274		
	455546	1324614_1	AW994075 AW994386		
	455649	1348708_1	BE065051 BE155165 BE064764 BE155231 BE064648 BE064671 BE064636		
	456401	1844649_2	W28146 W28187		
60	458480	59843_1	AI792298 H14121 AI375113 AA960851 AA744592 AV648739 AI298360 AW293609		
65	TABLE 21C:				
	Pkey:	Unique number corresponding to an Eos probeset			
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA			
		sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.			
	Strand:	Indicates DNA strand from which exons were predicted.			
	NL_position:	Indicates nucleotide positions of predicted exons.			
70	Pkey	Ref	Strand	NL_position	
	400536	9797380	Minus	170994-172025	
	400818	8569994	Plus	172644-172765,173085-173200	
	401586	9838242	Minus	93974-94099	
	401600	4388746	Minus	27363-27518,28727-28891,29526-29731	
	401783	7249190	Plus	139369-139827,140509-140591,140834-140990,141496-141657,141757-141882,142063-142283	
75	401929	3810670	Minus	3167-3286,4216-4310	
	402124	4033680	Plus	164206-164459	
	402493	9797670	Minus	205146-205240,205428-205542	
	403463	9929538	Plus	102596-102879	
	403469	9929739	Minus	4831-7707	
80	403582	8101186	Plus	18308-18458	
	403728	7534291	Minus	34481-34671	
	404091	7684554	Minus	82121-83229	
	404559	8748893	Minus	73499-73651,89575-89739	

5	404563	9838310	Plus	100136-100343
	404606	9212936	Minus	22310-23269
	404659	9797068	Minus	65026-67930
	404746	7219894	Minus	32643-32834
	405354	2642452	Plus	52213-53089
10	405403	6850244	Minus	37491-37670,40951-41031
	405502	9211311	Minus	50360-50584
	405715	4156209	Plus	26293-26706
	406023	8272661	Plus	205623-205836
	406475	9797684	Plus	125417-125563,128052-128180

TABLE 22A: ABOUT 301 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS

Table 22A lists about 301 genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/En+ HuO3 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 95<sup>th</sup> percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eas probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 RI: Ratio of CNS to GLIOBLASTOMA

25	Pkey	ExAccn	UnigeneID	Unigene Title	RI
	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	10.1
	445529	H14421	Hs.180513	ATP-binding cassette, sub-family A (ABC1	9.4
	415274	AF01548	Hs.78344	myosin, heavy polypeptide 11, smooth mus	7.5
	417167	AW206437	Hs.4290	ESTs	7.3
30	453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	6.5
	454076	AW204712	Hs.61957	ESTs	6.3
	417275	X63578	Hs.295449	parvalbumin	6.2
	412636	NM_004415		desmoplakin (DPI, DPII)	6.0
	409743	N48721	Hs.183506	hypothetical protein FLJ14213	5.9
35	424645	NM_014682	Hs.151449	KIAA0535 gene product	5.6
	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	5.5
	446390	AA233393	Hs.14992	hypothetical protein FLJ11151	5.2
	444409	AI792140	Hs.49265	ESTs	5.2
	409031	AA376836	Hs.288856	ESTs	5.1
40	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	4.8
	428414	AL049980	Hs.184216	DKFZP564C152 protein	4.8
	428874	W32133	Hs.194366	transferrin (prealbumin, amyloidosis I	4.6
	420605	BE391491	Hs.99291	HSPC156 protein	4.6
	445618	H79667	Hs.237642	Homo sapiens cDNA FLJ12052 fis, clone HE	4.6
45	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	4.4
	428508	BE252383	Hs.184668	SBB131 protein	4.4
	434064	AL049045	Hs.180758	hypothetical protein PR00082	4.3
	410330	AW023630	Hs.159425	ESTs	4.2
	426471	M22440	Hs.170009	transforming growth factor, alpha	4.2
50	409231	AA446644	Hs.692	CA733-2 antigen; epithelial glycoprotein	4.2
	448958	AB020651	Hs.22653	KIAA0844 protein	4.2
	428465	AW970976	Hs.293653	ESTs	4.0
	429470	AI878901	Hs.203862	guanine nucleotide binding protein (G pr	4.0
	432298	AL118812	Hs.274293	Homo sapiens mRNA; cDNA DKFZp761G1111 (I	3.9
55	427061	AB032971	Hs.173392	KIAA1145 protein	3.9
	430261	AA305127	Hs.237225	hypothetical protein HT023	3.9
	435145	AI277259	Hs.116631	ESTs	3.8
	416101	R24854	Hs.268806	ESTs	3.8
	426716	NM_006379	Hs.171921	sema domain, immunoglobulin domain (Ig),	3.8
60	438202	AW169287	Hs.22588	ESTs	3.8
	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypotheti	3.7
	419956	AL137939	Hs.40096	ESTs	3.7
	430573	AA744550	Hs.136345	ESTs	3.7
	422546	AB007969	Hs.301478	KIAA0500 protein	3.7
65	453344	BE349075	Hs.44571	ESTs	3.6
	417620	R02530	Hs.191198	ESTs	3.6
	421952	AA300900	Hs.98849	ESTs, Moderately similar to AF161511 H	3.6
	414631	AW970130	Hs.65406	ESTs	3.6
	437073	AI885608	Hs.94122	ESTs	3.5
70	441264	AA927170	Hs.23290	ESTs	3.5
	433629	R13140	Hs.13359	ESTs	3.5
	415114	D60468	Hs.94181	ESTs	3.4
	411770	NM_014278	Hs.71992	heat shock protein (hsp110 family)	3.4
	415666	H72693		gb:yu03c11.1 Soares fetal liver spleen	3.4
75	416851	AW963951	Hs.85618	ESTs	3.4
	443037	AW500305	Hs.8906	synaptin 7	3.4
	449511	AI436187	Hs.296261	guanine nucleotide binding protein (G pr	3.4
	427176	AW381569	Hs.40334	ESTs	3.4
	438704	AI435060	Hs.32825	ESTs	3.3
80	417175	R44558	Hs.94002	ESTs	3.3
	430865	AI073424	Hs.5232	HSPC125 protein	3.3
	457012	R41480	Hs.302754	ESTs	3.3
	405354			CX000321:gil5671579[ref]NP_031518.1] an	3.3
	432799	NM_016161	Hs.278960	alpha-1,4-N-acetylglucosaminyltransferas	3.3

5	429876	AB028977	Hs.225974	KIAA1054 protein	3.3
	434348	BE393191	Hs.181795	putative b,b-carotene-9',10'-dioxygenase	3.3
	441071	O79550	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	3.3
	445279	R41900	Hs.22245	ESTs	3.2
	414541	BE293116	Hs.76392	aldehyde dehydrogenase 1 family, member	3.2
	448072	AI459308	Hs.24908	ESTs	3.2
	402429			Target Exon	3.2
	433328	AW298159	Hs.23644	ESTs, Weakly similar to S65824 reverse t	3.2
	400138			Eos Control	3.1
10	414327	BE408145	Hs.165254	ESTs, Weakly similar to T24435 hypothei	3.1
	459399	BE407712	Hs.153998	creatine kinase, mitochondrial 1 (ubiqui	3.1
	433582	BE548749	Hs.148016	ESTs	3.1
	434104	AF116691	Hs.116459	hypothetical protein PRO2198	3.0
	404606			Target Exon	3.0
15	407173	T64349		gb:yc10d08.s1 Stratzene lung (937210) H	3.0
	415672	N53097	Hs.193579	ESTs	3.0
	448583	NM_015239	Hs.21542	KIAA1035 protein	3.0
	429043	AI824977	Hs.145319	ESTs	3.0
20	439165	AA029517	Hs.95162	KCNQ1 overlapping transcript 1	2.9
	449561	AA022240	Hs.17924	ESTs, Moderately similar to ALU1_HUMAN A	2.9
	436427	AI344378	Hs.143399	ESTs	2.9
	405403			Target Exon	2.9
	452197	AW023595	Hs.232048	ESTs	2.9
25	437357	AL359659	Hs.331666	Homo sapiens mRNA; cDNA DKFZp76202215 (I	2.9
	432772	AA832474	Hs.25851	ESTs	2.9
	415839	R40611	Hs.94694	ESTs	2.9
	411906	AW875765		gb:QV2-PT0012-020500-186-a08 PT0012 Homo	2.9
	409403	AA668224	Hs.6834	Homo sapiens cDNA: FLJ22547 fs, clone H	2.9
30	412258	AA376768	Hs.324841	hypothetical protein FLJ22622	2.8
	435836	AW292532	Hs.343667	homolog of yeast long chain polyunsatura	2.8
	433109	N58907	Hs.162430	EST	2.8
	404563			Target Exon	2.8
	427974	BE093023	Hs.188767	ESTs	2.8
35	413324	V00571	Hs.75294	corticotropin releasing hormone	2.7
	409263	AA069673	Hs.50319	ESTs	2.7
	454247	AJ243950	Hs.46735	deafness locus associated putative guani	2.7
	449180	AI633836	Hs.195649	ESTs	2.7
	416004	D11880	Hs.299254	Homo sapiens cDNA: FLJ23597 fs, clone L	2.7
40	424994	AW954525		gb:EST366595 MAGE resequences, MAGC Homo	2.7
	430371	D87466	Hs.240112	KIAA0276 protein	2.7
	449117	AW449310	Hs.210262	ESTs, Weakly similar to HSS2_HUMAN HEPAR	2.7
	451007	H38108	Hs.32759	ESTs	2.7
	414502	AL133721	Hs.224680	ESTs	2.7
45	458793	N80159	Hs.121849	microtubule-associated proteins 1A/1B II	2.7
	459053	AJ807052	Hs.210361	ESTs	2.7
	427229	AJ799751	Hs.5635	ESTs	2.7
	425649	U30930	Hs.158540	UDP glycosyltransferase 8 (UDP-galactose	2.7
	444922	AI921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL	2.7
50	433921	AA618174		gb:nq14f01.s1 NC1_CGAP_Thy1 Homo sapiens	2.7
	414272	AI651603	Hs.46988	ESTs	2.7
	418047	R37633	Hs.4847	ESTs	2.7
	421089	AB037771	Hs.101799	KIAA1350 protein	2.7
55	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	2.6
	414290	AI568801	Hs.71721	ESTs	2.6
	433703	AA210863	Hs.3532	nemo-like kinase	2.6
	408739	W01556	Hs.238797	ESTs, Moderately similar to I38022 hypot	2.6
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (I	2.6
	422137	AJ236885	Hs.112180	zinc finger protein 148 (pH2-52)	2.6
60	442023	AI187878	Hs.144549	ESTs	2.6
	421709	AA159394	Hs.107058	CED-6 protein	2.6
	426747	AA535210	Hs.171995	kallikrein 3, (prostate specific antigen	2.6
	412244	AW948175		gb:RCQ-MT0013-280300-Q21-c10 MT0013 Homo	2.6
	419386	AA236867		ESTs, Weakly similar to I38022 hypothei	2.6
65	423665	BE167153	Hs.24380	ESTs	2.6
	430320	BE245290	Hs.239218	uncharacterized hypothalamus protein HCD	2.6
	408468	AI909712	Hs.93837	phosphatidylinositol transfer protein, m	2.6
	410657	AF063228	Hs.85248	dynein, cytoplasmic, intermediate polype	2.6
	448871	BE616709	Hs.159265	kruddel-related zinc finger protein hckr	2.6
70	414516	AI307802	Hs.135560	ESTs, Weakly similar to T43458 hypothei	2.5
	459080	AW192083	Hs.290855	ESTs	2.5
	455040	AW852286		gb:QV0-CT0225-100400-187-d08 CT0225 Homo	2.5
	435712	AA694607	Hs.176956	ESTs	2.5
	431662	AA513406	Hs.152307	ESTs	2.5
75	435902	AA701887	Hs.297726	ESTs	2.5
	436624	T64297		fatty acid binding protein 1, liver	2.5
	443155	R54485	Hs.23772	ESTs	2.5
	439183	AW970600	Hs.303261	ESTs	2.5
	426365	AA376667	Hs.10283	RNA binding motif protein 8B	2.5
80	420033	D59502	Hs.292590	ESTs	2.5
	408438	AB011180	Hs.100960	KIAA0608 protein	2.5
	440205	T86950	Hs.105448	ESTs, Weakly similar to B34087 hypothei	2.5
	448785	BE048842	Hs.179075	Homo sapiens cDNA FLJ11881 fs, clone HE	2.5
	432251	AW972983	Hs.232165	polycythemia rubra vera 1; cell surface	2.5



	427115	AW972853	Hs.112237	ESTs	2.4
	433670	AA604405		gb:nc87h09.s1 NC1_CGAP_AA1 Homo sapiens	2.4
	452022	AW072330	Hs.293875	ESTs	2.4
5	408814	N62499	Hs.176227	hypothetical protein FLJ11155	2.4
	403469			Target Exon	2.4
	450374	AA397540	Hs.60293	Homo sapiens clone 122482 unknown mRNA	2.4
	451926	AW134519	Hs.96125	Homo sapiens, Similar to clone FLB3816,	2.4
	443622	A911527	Hs.11805	ESTs	2.4
10	456791	H05202	Hs.133968	FGF receptor activating protein 1	2.4
	414672	AJ218038	Hs.48504	ESTs, Moderately similar to ALU5_HUMAN A	2.4
	451522	BE565817	Hs.26498	hypothetical protein FLJ21657	2.4
	422414	AW875237	Hs.13701	ESTs	2.4
	425383	D83407	Hs.156007	Down syndrome critical region gene 1-lik	2.4
15	438086	AA336519	Hs.83623	nuclear receptor subfamily 1, group 1, m	2.4
	410240	AL157424	Hs.61289	synaptotagmin 2	2.4
	432408	N39127		ESTs, Weakly similar to A46010 X-linked	2.4
	450227	Z40670	Hs.181340	ESTs	2.4
	431325	AW026751	Hs.5794	ESTs, Weakly similar to 2109260A B cell	2.4
20	401600	BE247275		U5 snRNP-specific protein, 116 kD	2.3
	422963	M79141	Hs.13234	ESTs	2.3
	444897	AW137088	Hs.144857	ESTs	2.3
	418207	C14685	Hs.34772	ESTs	2.3
	445071	AJ280246	Hs.149504	ESTs	2.3
25	407868	NM_000950	Hs.40637	proline-rich Gla (G-carboxyglutamic acid	2.3
	433331	AJ738815	Hs.117323	ESTs	2.3
	440293	AJ004193	Hs.22123	ESTs	2.3
	428850	AA934975	Hs.185076	ESTs	2.3
	401783			NM_003771":Homo sapiens keratin, hair, a	2.3
30	419763	AJ039691	Hs.127486	ESTs	2.3
	416018	AW138239	Hs.78977	proprotein convertase subtilisin/kexin 1	2.3
	420912	AW853156	Hs.90787	ESTs	2.3
	442097	AW015799	Hs.128474	ESTs	2.3
	425907	AA365752	Hs.155965	ESTs	2.3
35	404091			Target Exon	2.3
	414106	BE300325	Hs.77135	RNA binding protein	2.3
	454288	BE222648	Hs.241432	ESTs, Highly similar to c380A1.1b (H.sap	2.3
	441040	AW449782	Hs.178803	ESTs	2.3
	424724	T06532	Hs.287709	Homo sapiens cDNA: FLJ22674 fs, clone H	2.3
40	441879	AJ521936	Hs.107149	novel protein similar to archaean yeast	2.3
	407988	N47760	Hs.285107	hypothetical protein FLJ13397	2.2
	452420	BE564871	Hs.29463	centrin, EF-hand protein, 3 (CDC31 yeast	2.2
	458676	AJ692464	Hs.202263	ESTs	2.2
	418407	AL044818	Hs.84928	nuclear transcription factor Y, beta	2.2
45	453938	AF082569	Hs.36794	D-type cyclin-interacting protein 1	2.2
	407978	AW385129	Hs.41717	phosphodiesterase 1A, calmodulin-depende	2.2
	420548	AA278246	Hs.920	ESTs	2.2
	422907	AJ879263	Hs.77273	Human glucose transporter pseudogene	2.2
	446351	AW444551	Hs.35380	x 001 protein	2.2
50	442117	AW664964	Hs.128899	ESTs; hypothetical protein for IMAGE:447	2.2
	429598	AA811257	Hs.269710	ESTs	2.2
	408480	AJ350337	Hs.164568	fibroblast growth factor 7 (keratinocyte	2.2
	411361	AW839073		gb:CM2-LT0066-030100-109-d06 LT0066 Homo	2.2
	459697	AA406062	Hs.98002	ESTs	2.2
55	409856	AW502082		gb:U1-HF-BR0p-a-q-g-04-0-U1.r1 NIH_MGC_5	2.2
	444760	AJ796296	Hs.208062	ESTs	2.2
	443258	AF169301	Hs.9098	sulfate transporter 1	2.2
	428206	AB020643	Hs.183006	KIAA0836 protein	2.2
	410119	F07841	Hs.13926	ESTs	2.2
60	413427	U31120	Hs.845	interleukin 13	2.2
	438021	AV653790	Hs.324275	VW domain-containing protein 1	2.2
	428652	AA584272	Hs.336224	transmembrane protein with EGF-like and	2.2
	429655	U48959	Hs.211582	myosin, light polypeptide kinase	2.2
	424153	AA451737	Hs.141496	MAGE-like 2	2.2
65	413303	AW836130	Hs.75277	hypothetical protein FLJ13910	2.2
	427287	NM_014903	Hs.174188	KIAA0938 protein	2.2
	449658	AJ964033	Hs.195730	ESTs, Weakly similar to CTXN RAT CORTEXI	2.2
	441984	AB037763	Hs.8059	synaptotagmin IV	2.2
	449709	BE410592	Hs.23918	hypothetical protein PP5395	2.2
70	408068	AW148652	Hs.167398	ESTs	2.2
	407819	R42185	Hs.102720	ESTs	2.2
	414203	BE262170	Hs.78629	ATPase, Na <sup>+</sup> transporting, beta 1 polypep	2.2
	454339	AW381980		gb:QV4-HT0316-091199-028-d05 HT0316 Homo	2.2
	448045	AJ297436	Hs.20166	prostate stem cell antigen	2.2
75	458480	AJ792238		p30 OBC protein	2.2
	449835	AW979300	Hs.293813	ESTs	2.2
	458547	AW204314	Hs.170784	ESTs	2.2
	411678	AJ907114	Hs.71465	squalene epoxidase	2.1
	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), oct	2.1
80	424632	AB014523	Hs.151406	KIAA0623 gene product	2.1
	449901	AJ574072		gb:wd1Sh01.x1 Soares_NFL_T_GBC_S1 Homo s	2.1
	431583	AL042613	Hs.262476	S-adenosylmethionine decarboxylase 1	2.1
	410538	AW753115		gb:PM0-CT0248-131099-001-h12 CT0248 Homo	2.1
	426775	AA384564	Hs.3628	ESTs	2.1

	433882	D88960	Hs.3610	KIAA0205 gene product	2.1
	458694	F12832	Hs.3610	ESTs	2.1
	417063	NS0515	Hs.45061	ESTs	2.1
5	416935	AA190712		gb:zp87f09.1 Stratagene HeLa cell s3 93	2.1
	436489	AJ272269	Hs.121429	zinc-binding protein Rboc728	2.1
	431128	AJ203545	Hs.296169	S-phase response (cyclin-related)	2.1
	442310	AF033199	Hs.8198	zinc finger protein 204	2.1
	432434	AL161977	Hs.2994	PCTAIRE protein kinase 3	2.1
10	400339	X57131	Hs.248209	H2A histone family, member F, pseudogene	2.1
	432266	AK000385	Hs.274222	hypothetical protein FLJ20378	2.1
	414759	AW295157	Hs.47587	ESTs	2.1
	438219	AJ916151	Hs.257194	ESTs	2.1
	451336	AJ264643	Hs.3610	ESTs	2.1
15	430538	AB032435	Hs.242821	differentiation-associated Na-dependent	2.1
	413493	BE144444		gb:MRO-HT0168-141199-002-009 HT0168 Homo	2.1
	428501	AL041182	Hs.98587	ESTs	2.1
	431568	AW972316	Hs.283703	ESTs	2.1
	456177	NM_012391	Hs.79414	prostate epithelium-specific Ets transcr	2.1
20	441976	AA428403	Hs.106131	ESTs	2.1
	421311	N71848	Hs.283609	hypothetical protein PRO2032	2.1
	428358	AA993222	Hs.101915	Stargard1 disease 3 (autosomal dominant)	2.1
	439973	AJ733308	Hs.124663	ESTs	2.1
	446185	AJ279191	Hs.149454	ESTs, Weakly similar to DSR6_HUMAN DOWN	2.1
25	451606	AA018791	Hs.7945	AIE-75 binding protein protein	2.1
	433516	AA595802	Hs.33410	ESTs, Weakly similar to T17279 hypotheti	2.1
	441987	AW452234	Hs.128293	ESTs	2.1
	457140	AJ279960	Hs.178140	ESTs	2.1
	414055	AW818687	Hs.5366	hypothetical protein FLJ21522	2.1
30	445066	BE178734	Hs.197422	ESTs	2.1
	459265	AJ003616		gb:AJ003616 Selected chromosome 21 cDNA	2.0
	425337	AA355442	Hs.169054	ESTs	2.0
	409339	AB020686	Hs.54037	ectonucleotide pyrophosphatase/phosphodi	2.0
	453023	AW028733	Hs.31439	serine protease inhibitor, Kuritz type,	2.0
35	425055	AW961959	Hs.96940	ESTs	2.0
	425068	AL048716	Hs.154387	KIAA0103 gene product	2.0
	444700	NM_003645	Hs.11729	fatty-acid-Coenzyme A ligase, very long-	2.0
	424823	NM_006226	Hs.153322	phosphatase C, epsilon	2.0
	450103	R08665	Hs.17244	hypothetical protein FLJ13605	2.0
40	448519	AW175665	Hs.278695	Homo sapiens protein mRNA, complete cds	2.0
	440808	AK001339	Hs.7432	hypothetical protein FLJ10477	2.0
	429958	AA322503	Hs.227011	G-substrate	2.0
	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kd)	2.0
	433068	NM_006456	Hs.288215	siatyltransferase	2.0
45	416982	J05401	Hs.80691	creatine kinase, mitochondrial 2 (sarcom	2.0
	423479	NM_014326	Hs.129208	death-associated protein kinase 2	2.0
	407341	AA918888	Hs.204918	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.0
	452625	AA724771	Hs.61425	ESTs	2.0
	410378	R23324	Hs.41693	DnaJ (Hsp40) homolog, subfamily B, membe	2.0
50	409767	AW501470		gb:U1-HF-BP0p-ajd-b-03-0-Utr1 NIH_MGC_5	2.0
	415925	H09474	Hs.202341	Homo sapiens cDNA: FLJ23573 fs, clone L	2.0
	405670			C2000627:gi12034653 gb AAG45951.1 AF22	2.0
	408206	AF041853	Hs.43670	kinesin family member 3A	2.0
	458660	AJ299739	Hs.99601	hypothetical protein FLJ12553	2.0
55	432278	AL137506	Hs.274256	hypothetical protein FLJ23563	2.0
	404559			Target Exon	2.0
	403728			Target Exon	2.0
	413055	AV655701	Hs.75183	cytochrome P450, subfamily IIE (ethanol-	2.0
	407786	AA687538	Hs.36972	tetraspan 1	2.0
60	413266	BE300352		gb:600944231F1 NIH_MGC_17 Homo sapiens c	2.0
	453994	BE180964	Hs.165590	ribosomal protein S13	2.0
	451583	AI653797	Hs.24133	ESTs	2.0
	443244	AI457235	Hs.166479	ESTs	2.0
	453396	AW162768	Hs.22620	ESTs	2.0
65	415694	AW194301	Hs.339283	Human DNA sequence from clone RP1-187J11	2.0
	459511	AI142379		gb:gg64c01.r1 Soares_testis_NHT Homo sap	2.0
	450757	BE081050	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	2.0
	451032	W03692	Hs.323079	Homo sapiens mRNA; cDNA DKFZp564P116 (fr	2.0
	440509	BE410132	Hs.134202	ESTs, Weakly similar to T17279 hypotheti	2.0
70	444647	H14718	Hs.11506	Human clone Z3589 mRNA sequence	2.0
	447932	AA837474	Hs.20021	vesicle-associated membrane protein 1 (s	2.0
	444749	AI190672	Hs.65926	ESTs	2.0
	446277	AI284218	Hs.159204	ESTs	2.0
	452550	AA026735	Hs.326048	Homo sapiens mRNA; cDNA DKFZp434M0420 (f	2.0
75	453843	D25215	Hs.35804	hect domain and RLD 3	2.0
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	2.0
	409265	T78737	Hs.321062	ESTs	2.0

TABLE 228:

80	Key:	Unique Eos probeset identifier number
	CAT number:	Gene cluster number
	Accession:	Genbank accession numbers

Key CAT Number Accession

409767	1154015_1	AW501470 AW502931 AW499500
409856	1156268_1	AW502082 AW502979 AW502807 AW501876
410538	1207341_1	AW753115 AW753113 R45779
411361	1240611_1	AW839073 AW839234 AW839230 AW878302 AW839109 AW843897
411906	1265204_1	AW875765 H50294 AW875444
412244	1284692_1	AW948175 AW947637 AW902869 AW947537 AW947531 AW947532 AW947530
412636	13165_1	NM_004415 AL031058 M77830 BE149760 AW752599 AW848723 AW376697 AW376817 AW376699 AW848371 AW376782 AW848789 AW361413
		AW849074 AW997139 AW799304 AW799309 BE077020 BE077017 BE185187 AW997196 BE156621 BE179915 BE006561 BE143155 AW890985
		BE002107 AW103521 AA857316 AW383133 BE011378 AW170253 BE185750 AW886475 BE160433 J05211 BE082576 BE082584 BE004047
		AW607238 AW377700 AW377699 BE082526 BE082505 BE082507 BE082514 AW178000 AW177933 AJ905935 AW747877 AW748114 BE148516
		AW265328 AW847678 AW847688 AW365151 AW365148 AW365153 AW365156 AW365175 AW365157 AW365154 AW068840 BE005272 AW365145
		BE001925 BE182166 BE144243 BE001923 AJ951766 AJ434518 BE184920 BE184933 AJ284090 BE184941 AW804674 BE184924 C04715 W39488
		AW995615 BE184948 BE159646 AW606653 AA099891 AA131128 AA337270 AA340777 AW384371 AA852212 R58704 AW366566 AW364859
		AA025851 AA025852 AA455100 AA719958 AW352220 AW996245 BE166351 BE073467 AA377127 AW890264 AW609750 AW391912 AW849690
		T87267 AW853812 AA852213 W74149 BE009090 AA056401 H91011 AW368529 AW390272 C18467 AW674920 N57176 AA026480 AW576767
		H93284 AA026863 AW177787 AA026654 AW177786 BE092134 BE092137 BE092136 AW177784 AJ022862 BE091653 AW376811 AW848592
		AA040018 BE185331 BE182164 AA368564 AW951576 T29918 AA131077 W95048 W25458 AW205789 H90899 N28754 W32490 R20904 BE167181
		BE167165 N84767 H27408 H30145 AJ190590 C03378 AJ554403 AJ205263 AA128470 AJ392926 AF139065 AW370813 AW370827 AW798417
		AW798780 AW798883 AW798569 R33557 AA149190 C03029 AW177783 AA088866 AW370829 AA247685 BE002273 AJ760818 AJ439101 AW879451
		AJ700963 AA451923 AJ340326 AJ590975 T48793 AJ588096 AJ142882 AA039975 AJ470146 AA946836 BE067737 BE067788 W19287 AA644381
		AJ702424 AJ417612 AJ306554 AJ686869 AJ568892 AW190555 AJ571075 AJ220573 AA056527 AJ471874 AJ304772 AW517828 AJ515596 AJ627383
		AJ270345 AW021347 AW166807 AW105614 AJ346078 AA552300 W95070 AJ494069 AJ911702 AA149191 AA026864 AJ830049 AJ887258 AW780435
		AJ910434 AJ819984 AJ858262 AJ078449 AJ025932 AJ860584 AJ635878 AA026047 AA703232 D12062 AW192085 AA658154 AW514597 AW591892
		T87181 AA782066 AW243815 AW150038 AW268383 AW004633 AJ927207 AA782109 AW473233 AJ804485 AW169216 AJ572669 AA602182
		AW015480 AW771865 AJ720027 AA961816 AA283207 AW079662 AJ498487 AJ348053 AJ783914 H44405 AW799118 AA128330 AA515500 AA918281
		W02156 AJ905927 AA022701 W38382 R20795 T77861 AW860878
		BE300352 BE299274 BE075351 BE297444
		BE144444 BE144430
		H72693 R08673 H72694 F20990 R08580
		AA190712 AA190665 AA252564
		AA236887 AA237066 AA354236 AW957759 H08961
		AW954525 AJ372685 AA349501 AJ372687 H10564
		N39127 F20776 AJ082691 AA865520 F36964 F33894
		AA604405 BE062234 AW748386
		AA518174 AJ114549 R36464 R36465
		T64297 AA894931 NM_001443 M10050 AW843109 AJ698516 T53219 T48785 T64166 AA706930 R29613 T55913 T56518 T64679 R29666 M10617
		AJ768596 AA101894 W90338 AJ742193 AW752206 AA099433 T53220 AW082135 AW272775 T29562 T55862 AJ343047 AJ345671 T68235 T68121
		AW842284
		AJ674072 BE268487
		AW381980 BE152244 BE152235 BE152238 BE152232
		AW852286 AW851934 AW852096 AW852274
		AJ792298 H14121 AJ375113 AA960851 AA744592 AV648739 AJ298360 AW293609
		AJ003616 AJ003654 AJ003617

45	TABLE 22C:	
	Pkey:	Unique number corresponding to an Eos probeset
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA
		sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
	Strand:	Indicates DNA strand from which exons were predicted.
50	NL_position:	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
401600	4388746	Minus	27363-27518,28727-28891,29526-29731
401783	7249190	Plus	139369-139827,140509-140591,140834-140990,141495-141657,141757-141882,142063-142283
402429	9796372	Minus	57622-57793,59282-59402,59624-59827
403469	9929738	Minus	4831-7707
403728	7534291	Minus	34481-34671
404091	7684554	Minus	82121-83229
404559	8748893	Minus	73499-73651,89575-89739
404563	9838310	Plus	100136-100343
404606	9212936	Minus	22310-23269
405354	2642452	Plus	52213-53089
405403	6850244	Minus	37491-37670,40951-41031
405670	4662655	Plus	96543-96870

70	TABLE 23A: ABOUT 441 GENES SIGNIFICANTLY DOWN-REGULATED IN LOWER GRADE GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS	
	Table 23A lists about 441 genes significantly down-regulated in lower grade glioblastoma (LGG) compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" LGG was greater than or equal to 2.5. The "average" normal CNS level was set to the 75th percentile amongst various normal CNS tissues. The "average" LGG level was set to the 95th percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.	

75	Pkey:	Unique Eos probeset identifier number			
	ExAccn:	Exemplar Accession number, Genbank accession number			
	UnigeneID:	Unigene number			
	Unigene Title:	Unigene gene title			
	R1:	Ratio of CNS to LOWER GRADE GLIOBLASTOMA			
80	Pkey	ExAccn	UnigeneID	Unigene Title	R1
	415388	AF018081	Hs.78409	collagen, type XVIII, alpha 1	10.3
	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	10.1
	445529	H14421	Hs.180513	ATP-binding cassette, sub-family A (ABC1	9.9
	417433	BE270266	Hs.82128	5T4 oncofetal trophoblast glycoprotein	7.8

	422746	NM_004484	Hs.119651	glypican 3	7.7
	448362	AA541767	Hs.21015	hypothetical protein DKFZp564L0864 simil	7.7
	430573	AA744550	Hs.136345	ESTs	7.6
5	415274	AF001548	Hs.78344	myosin, heavy polypeptide 11, smooth mus	7.5
	419290	AI128114	Hs.112885	spinal cord-derived growth factor-B	7.4
	424670	W61215	Hs.116651	epithelial V-like antigen 1	7.3
	417167	AW206437	Hs.4290	ESTs	7.3
	416018	AW138239	Hs.78977	proprotein convertase subtilisin/texin 1	7.3
10	424632	AB014523	Hs.151406	KIAA0623 gene product	6.9
	453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	6.5
	411770	NM_014278	Hs.71992	heat shock protein (hsp110 family)	6.5
	439272	AA832474	Hs.25851	ESTs	6.5
	414831	MG1158	Hs.77439	protein kinase, cAMP-dependent, regulato	6.4
15	454076	AW204712	Hs.61957	ESTs	6.3
	446390	AA233393	Hs.14992	hypothetical protein FLJ11151	6.3
	430865	AI073424	Hs.5232	HSPC125 protein	6.3
	434064	AL049045	Hs.180758	hypothetical protein PRO0082	6.2
	417458	NM_005655	Hs.82173	TGFB inducible early growth response	6.1
20	412636	NM_004415		desmoplakin (DPI, DPII)	6.0
	409743	N48721	Hs.183506	hypothetical protein FLJ14213	5.9
	430998	AF128847	Hs.204038	indolethylamine N-methyltransferase	5.8
	434725	AK000796	Hs.4104	hypothetical protein	5.6
	417175	R44558	Hs.94002	ESTs	5.6
	417275	X63578	Hs.295449	parvalbumin	5.5
25	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	5.5
	431009	BE149762	Hs.48956	gap junction protein, beta 6 (connexin 3	5.4
	420297	AB28272	Hs.88323	ESTs, Weakly similar to ALU1_HUMAN ALU 5	5.4
	412472	AW975398	Hs.293836	ESTs	5.4
30	443258	AF169301	Hs.9098	sulfate transporter 1	5.3
	427210	BE396283	Hs.173987	eukaryotic translation initiation factor	5.3
	442084	AI422867	Hs.88594	ESTs	5.2
	438868	AW246243	Hs.334800	hypothetical protein FLJ20974	5.2
	444409	AI792140	Hs.49265	ESTs	5.2
	442310	AF033199	Hs.8198	zinc finger protein 204	5.1
35	409031	AA376836	Hs.288856	ESTs	5.1
	438460	AB020702	Hs.6224	KIAA0895 protein	5.1
	411939	AI365585	Hs.146246	ESTs	5.0
	448429	D17408	Hs.21223	calponin 1, basic, smooth muscle	5.0
40	413293	AL047483	Hs.302498	GTP-binding protein homologous to Saccha	5.0
	408968	AI652236	Hs.49376	hypothetical protein FLJ20644	5.0
	443491	AW499665	Hs.9456	SWI/SNF related, matrix associated, acti	4.9
	448960	AF006513	Hs.22670	chromodomain helicase DNA binding protei	4.9
	416101	R24854	Hs.268806	ESTs	4.9
45	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypothesi	4.9
	424845	NM_014682	Hs.151449	KIAA0535 gene product	4.8
	437679	NM_014214	Hs.5753	inositol(myo)-1(or 4)-monophosphatase 2	4.8
	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	4.8
	414502	AL133721	Hs.224680	ESTs	4.8
50	442572	AI001922	Hs.135121	hypothetical protein FLJ22415	4.8
	412700	BE222433	Hs.239208	ESTs, Weakly similar to I38022 hypothesi	4.8
	422603	BE242587	Hs.118651	hematopoietically expressed homeobox	4.8
	420605	BE391491	Hs.99291	HSPC156 protein	4.7
55	422482	AI439905	Hs.344476	gb:ti57g08.x1 NCL_CGAP_Lym12 Homo sapien	4.7
	416636	N32536	Hs.42645	solute carrier family 16 (monocarboxylic	4.7
	409263	AA069573	Hs.50319	ESTs	4.7
	410657	AF063228	Hs.65248	dynein, cytoplasmic, intermediate polype	4.6
	457216	AA452554	Hs.283697	ESTs, Weakly similar to A41796 neural ro	4.6
	433423	BE407127	Hs.8997	heat shock 70kD protein 1A	4.6
60	449901	AI874072		gb:wd15h01.x1 Soares_NFL_T_GBC_S1 Homo s	4.6
	445618	H79667	Hs.237642	Homo sapiens cDNA FLJ12052 fs, clone HE	4.6
	431582	F07136	Hs.261828	G protein-coupled receptor kinase 7	4.5
	424675	NM_005512	Hs.151641	glycoprotein A repetitions predominant	4.5
	449511	AI436187	Hs.296261	guanine nucleotide binding protein (G pr	4.5
65	401600	BE247275		U5 snRNP-specific protein, 116 kD	4.5
	447135	T58148		gb:yt68g08.s1 Stratagene lung (937210) H	4.5
	426689	BE245550	Hs.171825	basic helix-loop-helix domain containing	4.4
	429598	AA811257	Hs.269710	ESTs	4.4
	428206	AB020643	Hs.183006	KIAA0836 protein	4.4
70	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	4.4
	428508	BE252383	Hs.184668	SBB131 protein	4.4
	435145	AI277259	Hs.116631	ESTs	4.4
	405670			C2000627:gil12034653gb:AAG45951.1JAF22	4.4
75	442321	AF207664	Hs.8230	a disintegrin-like and metalloprotease (	4.3
	427670	BE612888	Hs.180224	myosin regulatory light chain	4.3
	428465	AW970976	Hs.293653	ESTs	4.3
	449180	AI633836	Hs.195649	ESTs	4.3
	402364	AV653231		CCAAT/enhancer binding protein (C/EBP),	4.3
80	426471	M22440	Hs.170009	transforming growth factor, alpha	4.2
	419386	AA236867		ESTs, Weakly similar to I38022 hypothesi	4.2
	441408	AI733249	Hs.126897	ESTs	4.2
	419631	AW188117	Hs.303154	popeye protein 3	4.2
	409231	AA446644	Hs.692	GA733-2 antigen; epithelial glycoprotein	4.2
	448958	AB020651	Hs.22653	KIAA0844 protein	4.2

5	421878	AA299652	Hs.111496	Homo sapiens cDNA FLJ11643 fis, clone HE	4.2
	422278	AF072873	Hs.114218	trizzled (Drosophila) homolog 6	4.2
	459053	A807052	Hs.210361	ESTs	4.1
	450600	BE079478	Hs.24880	ESTs	4.1
	415839	R40611	Hs.94694	ESTs	4.1
	450374	AA397540	Hs.60293	Homo sapiens clone 122482 unknown mRNA	4.1
	422270	AF114494	Hs.114062	protein tyrosine phosphatase-like (prot)	4.1
	405674			NM_022775:Homo sapiens hypothetical prot	4.1
10	453906	AW444952	Hs.257054	ESTs	4.1
	419318	AW969742	Hs.291005	ESTs	4.0
	456382	NM_0011126	Hs.30011	adenylosuccinate synthase	4.0
	435902	AA701867	Hs.297726	ESTs	4.0
	449483	AK001971	Hs.23607	hypothetical protein FLJ11109	4.0
15	434228	Z42047	Hs.283978	Homo sapiens PRO2751 mRNA, complete cds	4.0
	403890			C50020367:gi110241574 emb CAC09416.1  (A	4.0
	429470	AJ878901	Hs.203862	guanine nucleotide binding protein (G pr	4.0
	409856	AW502082		gb:U140F-BR0p-ajq-g-04-0-UL11 NIH_MGC_5	4.0
	443682	A1383061	Hs.47248	ESTs, Highly similar to similar to Cdc14	4.0
20	420230	AL034344	Hs.284186	forkhead box C1	4.0
	410509	AW840743		gb:QV1-CN0002-080300-102-07 CN0002 Homo	4.0
	428414	AL049980	Hs.184216	DKFZP564C152 protein	3.9
	400138			Eos Control	3.9
	451522	BE565817	Hs.26498	hypothetical protein FLJ21657	3.9
25	436521	AW203986	Hs.213003	ESTs	3.9
	401507			C150008107:gi11131272 sp P79331 ATS2_BO	3.9
	449785	A125235	Hs.288300	hypothetical protein FLJ23231	3.9
	434815	AF155582	Hs.46744	core 1 UDP-galactose-4-epimerase	3.9
	411906	AW875765		gb:QV2-PT0012-020500-186-08 PT0012 Homo	3.9
30	440509	BE410132	Hs.134202	ESTs, Weakly similar to T17279 hypothi	3.9
	427061	AB032971	Hs.173392	KIAA1145 protein	3.9
	430261	AA305127	Hs.237225	hypothetical protein HT023	3.9
	449658	A1964033	Hs.195730	ESTs, Weakly similar to CTXN RAT CORTEXI	3.8
	429876	AB028977	Hs.225974	KIAA1054 protein	3.8
35	410330	AW023630	Hs.159425	ESTs	3.8
	431369	BE184455	Hs.251754	secretory leukocyte protease inhibitor (	3.8
	437659	AB007944	Hs.5737	KIAA0475 gene product	3.8
	438171	AW976507	Hs.293515	ESTs	3.8
	418394	AF132818	Hs.84728	Kruppel-like factor 5 (intestinal)	3.8
40	405588			NM_000299:Homo sapiens plakophilin 1 (ec	3.8
	432298	AL118812	Hs.274293	Homo sapiens mRNA; cDNA DKFZp761G1111 (f	3.8
	426716	NM_006379	Hs.171921	sera domain, immunoglobulin domain (Ig),	3.8
	438202	AW169287	Hs.22588	ESTs	3.8
	404606			Target Exon	3.8
45	425329	AJ961644	Hs.145444	Homo sapiens cDNA FLJ11494 fis, clone HE	3.8
	407604	AW191962	Hs.288061	collagen, type VIII, alpha 2	3.8
	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	3.7
	430868	W93178	Hs.5232	HSPC125 protein	3.7
	457008	AA410446	Hs.112011	ESTs, Weakly similar to unknown (H.sapie	3.7
50	458660	AJ299739	Hs.99601	hypothetical protein FLJ12553	3.7
	408732	AL117490	Hs.47225	Ras-associated protein Rap1	3.7
	436281	AW411194	Hs.85195	myeloid leukemia factor 1	3.7
	413493	BE144444		gb:MR0-HT0168-141199-002-09 HT0168 Homo	3.7
	418407	AL044818	Hs.84928	nuclear transcription factor Y, beta	3.7
55	445797	AJ253414		gb:aq14f04.x1 Stanley Frontal NS pool 2	3.7
	457121	AJ743770	Hs.180513	ESTs, Weakly similar to KIAA0822 protein	3.6
	417620	R02530	Hs.191198	ESTs	3.6
	421952	AA300900	Hs.98849	ESTs, Moderately similar to AF161511 1 H	3.6
	454247	AJ243950	Hs.48735	deafness locus associated putative guard	3.6
60	431662	AA513406	Hs.152307	ESTs	3.6
	426908	AW815163	Hs.172851	arginase, type II	3.6
	438519	AJ186033	Hs.147025	ESTs, Weakly similar to C57785 zinc fing	3.6
	415608	W70022		gb:zd51e10.r1 Soares_tetal_heart_NbRH19W	3.6
	444859	AW449137	Hs.157487	ESTs	3.6
65	414631	AW970130	Hs.65406	ESTs	3.6
	428897	AJ245719	Hs.194385	hypothetical protein FLJ20234	3.5
	437073	AJ885608	Hs.94122	ESTs	3.5
	427287	NM_014903	Hs.174188	KIAA0938 protein	3.5
	415927	AL120168	Hs.78919	Kell blood group precursor (McLeod pheno	3.5
70	450235	AA007512	Hs.17538	ESTs	3.5
	447263	AW965667	Hs.322406	hypothetical protein FLJ14494	3.5
	419440	AB020689	Hs.90419	KIAA0882 protein	3.5
	427254	AL121523	Hs.97774	ESTs	3.5
	434348	BE393191	Hs.181796	putative b,b-carotene-9,10'-dioxygenase	3.5
75	441264	AA927170	Hs.23290	ESTs	3.5
	433629	R13140	Hs.13359	ESTs	3.5
	446494	AA463276	Hs.288908	VW Domain-Containing Gene	3.5
	441585	AJ760755	Hs.202383	ESTs	3.5
	438704	AA35060	Hs.32825	ESTs	3.4
80	445279	R41900	Hs.22245	ESTs	3.4
	415114	D60468	Hs.94181	ESTs	3.4
	449561	AJ022240	Hs.17924	ESTs, Moderately similar to ALU1_HUMAN A	3.4
	452420	BE564871	Hs.29463	centrin, EF-hand protein, 3 (CDC31 yeast	3.4
	416517	AA775987	Hs.79357	proteasome (prosome, macropain) 26S subu	3.4

	441134	W29092	Hs.346950	cellular retinoic acid-binding protein 1	3.4
	427176	AW381569	Hs.40334	ESTs	3.4
	415668	AW957684	Hs.306814	hypothetical protein FLJ21889	3.4
5	450928	AJ744417		gb:tr10h12.x1 NCI_CGAP_Ov23 Homo sapiens	3.4
	457012	R41480	Hs.302754	ESTs	3.3
	405354			CX000321:gi 6671579 ref NP_031518.1  eri	3.3
	408855	T83061	Hs.319946	Homo sapiens mRNA for KIAA1727 protein,	3.3
	418525	AW450369	Hs.86937	ESTs	3.3
10	420174	AJ824144	Hs.23912	ESTs	3.3
	437124	AA554458	Hs.278860	KIAA0666 protein	3.3
	419211	BE270817	Hs.37617	ESTs, Weakly similar to A53933 myosin I	3.3
	424335	AW021508	Hs.28170	ESTs	3.3
	453344	BE349075	Hs.44571	ESTs	3.3
15	428065	AJ634046	Hs.157313	ESTs	3.3
	417248	AA328449	Hs.247302	tristid gastrulation	3.3
	429415	NM_002593	Hs.202097	procollagen C-endopeptidase enhancer	3.3
	411393	AW797437	Hs.69771	B-factor, properdin	3.3
	406976	M60299		gb:Human alpha-1 collagen type II gene,	3.3
20	441071	D79550	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	3.3
	414327	BE408145	Hs.185254	ESTs, Weakly similar to T24435 hypothet	3.3
	433703	AA210863	Hs.3532	nemo-like kinase	3.3
	418880	N87353	Hs.89421	CBF1 interacting corepressor	3.3
	445947	AW612084	Hs.298494	ESTs	3.3
25	437334	AL353947	Hs.283780	hypothetical protein DKFZp761N1814	3.3
	434795	BE620794	Hs.4147	translocating chain-associating membrane	3.2
	400127			Eos Control	3.2
	414602	AW630088	Hs.76550	Homo sapiens mRNA: cDNA DKFZp564B1264 (f	3.2
	402429			Target Exon	3.2
30	428695	AJ355647	Hs.189999	purinergic receptor (family A group 5)	3.2
	427699	AW965076	Hs.180378	hypothetical protein 669	3.2
	403442			Target Exon	3.2
	419272	AA663904	Hs.89862	TNFRSF1A-associated via death domain	3.2
	456614	AV653110	Hs.106650	hypothetical protein FLJ20533	3.2
35	407581	R48402	Hs.173508	P3ECSL	3.2
	412633	AF001691	Hs.74304	periplakin	3.2
	433328	AW298159	Hs.23644	ESTs, Weakly similar to S65824 reverse t	3.2
	449294	AJ651786	Hs.195045	ESTs	3.1
	447799	AJ564739	Hs.68505	ESTs	3.1
40	434045	AA065133	Hs.152316	hypothetical protein PRO0971	3.1
	409403	AA668224	Hs.6634	Homo sapiens cDNA: FLJ22547 fs, clone H	3.1
	420033	D59502	Hs.292590	ESTs	3.1
	422137	AJ236885	Hs.112180	zinc finger protein 148 (pHZ-52)	3.1
	444760	AJ796296	Hs.208062	ESTs	3.1
45	403488			ENSP00000201948:KARYOPHERIN BETA2B HOMOL	3.1
	411359	H85088	Hs.22635	ESTs	3.1
	443037	AW500305	Hs.8906	syntaxin 7	3.1
	407127	R45970	Hs.236349	EST	3.1
	416851	AW963951	Hs.85618	ESTs	3.1
50	416838	D84109	Hs.80248	RNA-binding protein gene with multiple s	3.1
	443030	R68048	Hs.9238	hypothetical protein FLJ23516	3.1
	410389	AW954049	Hs.8177	ESTs, Weakly similar to PIHUB6 salivary	3.1
	459399	BE407712	Hs.153998	creatine kinase, mitochondrial 1 (ubiqui	3.1
	433582	BE548749	Hs.148016	ESTs	3.1
55	431128	AJ203545	Hs.296169	S-phase response (cyclin-related)	3.1
	420411	AJ581085	Hs.24678	sphingosine-1-phosphatase	3.1
	459584	AJ910884	Hs.346429	ESTs	3.1
	449883	AJ004464	Hs.344156	gb:ot56e06.s1 Soares_testis_NHT Homo sap	3.1
60	445320	AA503887	Hs.167011	Homo sapiens cDNA: FLJ21362 fs, clone C	3.1
	410786	AW803340		gb:IL2-UM0079-090300-050-D02 UM0079 Homo	3.1
	418207	C14585	Hs.34772	ESTs	3.0
	420521	AJ915734	Hs.87298	ESTs	3.0
	425890	H24530	Hs.273294	hypothetical protein FLJ20069	3.0
	416749	AW068550.comp	Hs.79732	fibulin 1	3.0
65	412258	AA376768	Hs.324841	hypothetical protein FLJ22622	3.0
	407173	T64349		gb:yc10d08.s1 Stratagene lung (937210) H	3.0
	415672	N53097	Hs.193579	ESTs	3.0
	448583	NM_015239	Hs.21542	KIAA1035 protein	3.0
	429043	AJ824977	Hs.145319	ESTs	3.0
70	404091			Target Exon	3.0
	406085			Target Exon	3.0
	438825	BE327427	Hs.79953	ESTs	3.0
	457441	BE467737	Hs.146125	ESTs	3.0
	403512			C3000579:gi 12643308:sp O9Y4K1 AIM1_HUM	3.0
75	416866	AA297356	Hs.80324	serine/threonine protein phosphatase cat	3.0
	439877	H39685	Hs.250700	trypsin beta 1	3.0
	441984	AB037763	Hs.8059	synaptotagmin IV	3.0
	436765	AB028952	Hs.5307	synaptopodin	3.0
	445071	AJ280246	Hs.149504	ESTs	3.0
80	404333			C7001735:gi 7768636 dbj BAA95483.1  (AB	3.0
	422907	AJ879263	Hs.77273	Human glucose transporter pseudogene	3.0
	413266	BE300352		gb:600944231F1 NIH_MGC_17 Homo sapiens c	3.0
	429393	AA383024	Hs.201603	Homo sapiens mRNA: cDNA DKFZp434D0917 (f	3.0
	415337	Z44881	Hs.9012	ESTs, Weakly similar to S26650 DNA-bind	3.0

	415044	AA419108	Hs.77840	annexin A4	2.9
	403469			Target Exon	2.9
	416928	AA190573	Hs.85902	ESTs, Weakly similar to MCHU calmodulin	2.9
5	430195	AW969308	Hs.188594	ESTs	2.9
	458544	A631038	Hs.196843	ESTs	2.9
	440667	BE076969	Hs.7337	hypothetical protein FLJ10936	2.9
	424641	AB001106	Hs.151413	gla maturation factor, beta	2.9
	428820	AA438187	Hs.172631	integrin, alpha M (complement component)	2.9
	405403			Target Exon	2.9
10	452197	AW023595	Hs.232048	ESTs	2.9
	437357	AL359559	Hs.331666	Homo sapiens mRNA; cDNA DKFZp762O2215 (f	2.9
	423479	NM_014326	Hs.129208	death-associated protein kinase 2	2.9
	404559			Target Exon	2.9
	406270			Target Exon	2.9
15	422190	H17399	Hs.11506	Human clone 23589 mRNA sequence	2.9
	431300	AA502346		gb:ne26b03.s1 NCI_CGAP_Co3 Homo sapiens	2.9
	420286	AJ796395	Hs.111377	ESTs	2.9
	422964	AW439476	Hs.256895	ESTs	2.9
	431583	AL042613	Hs.262476	S-adenosylmethionine decarboxylase 1	2.9
20	428595	AB037795	Hs.186547	KIAA1374 protein	2.9
	402198			NM_024323:Homo sapiens hypothetical prot	2.9
	416246	U47413	Hs.79101	cyclin G1	2.9
	427593	AK001132	Hs.179752	Homo sapiens cDNA FLJ10270 fs, clone HE	2.9
	446351	AW444551	Hs.35380	x 001 protein	2.9
25	440432	AJ29637	Hs.202653	ESTs, Weakly similar to T14267 Xln prote	2.9
	446525	AW967069	Hs.211556	hypothetical protein MGC5487	2.8
	400965			C11002190:gil12737279[ref]XP_012163.1]	2.8
	436489	AJ272269	Hs.121429	zinc-binding protein Rboc728	2.8
	458793	N80159	Hs.121849	microtubule-associated proteins 1A/1B li	2.8
30	406810	U82275	Hs.94498	leukocyte immunoglobulin-like receptor,	2.8
	445577	N40696	Hs.137054	cytoplasmic polyadenylation element bind	2.8
	428874	W32133	Hs.194366	transferrin (prealbumin, amyloidosis I	2.8
	418745	AW882645	Hs.88044	sprouty (Drosophila) homolog 1 (antagoni	2.8
	433095	AK001092	Hs.302480	Homo sapiens cDNA FLJ10230 fs, clone HE	2.8
35	425580	L11144	Hs.1907	galanin	2.8
	418233	AA176633		gb:zp13g01.s1 Stratagene fetal retina 93	2.8
	438219	AJ916151	Hs.257194	ESTs	2.8
	404661			C9000306:gil12737280[ref]XP_006682.2] k	2.8
40	435836	AW292532	Hs.343667	homolog of yeast long chain polyunsatura	2.8
	423665	BE167153	Hs.24380	ESTs	2.8
	430320	BE245290	Hs.239218	uncharacterized hypothalamus protein HCD	2.8
	401783			NM_003771:Homo sapiens keratin, hair, a	2.8
	423837	AW937063	Hs.275150	gb:PM3-DT0037-231299-001-g11 DT0037 Homo	2.8
45	447271	AL041747	Hs.170261	ESTs	2.8
	438913	AJ380429	Hs.172445	ESTs	2.8
	441962	AW972542	Hs.289008	Homo sapiens cDNA: FLJ21814 fs, clone H	2.8
	444385	BE278964	Hs.11085	CGI-111 protein	2.8
	432278	AL137506	Hs.274256	hypothetical protein FLJ23563	2.8
	415666	H72693		gb:yu03c11.r1 Soares fetal liver spleen	2.8
50	452345	AA293279	Hs.29173	hypothetical protein FLJ20515	2.8
	445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	2.8
	439556	A623752	Hs.163603	ESTs	2.8
	405474			NM_001093:Homo sapiens acetyl-Coenzyme	2.8
55	426208	AJ370379	Hs.132216	ESTs	2.8
	419461	AJ452601	Hs.288869	nuclear receptor subfamily 2, group F, m	2.8
	428501	AL041162	Hs.98587	ESTs	2.8
	413427	U31120	Hs.845	interleukin 13	2.8
	433109	N58907	Hs.162430	EST	2.8
60	427974	BE093023	Hs.188767	ESTs	2.8
	455040	AW852288		gb:OV0-CT0225-100400-187-d08 CT0225 Homo	2.8
	453994	BE180964	Hs.165590	ribosomal protein S13	2.8
	459171	AW967801	Hs.64783	ESTs, Weakly similar to T42705 hypotheti	2.8
	404845			C22000163:gil10242166[gb]AAG15318.1]AF2	2.8
65	408182	AA047854		gb:zf49g04.r1 Soares retina N2b4HR Homo	2.8
	427111	AA351026	Hs.173594	serine (or cysteine) proteinase inhibitor	2.7
	414541	BE293116	Hs.76392	aldehyde dehydrogenase 1 family, member	2.7
	432815	Z30045	Hs.293676	ESTs	2.7
	404036			Target Exon	2.7
70	418157	W09382	Hs.283709	lipopolysaccharide specific response-7 p	2.7
	426403	NM_000361	Hs.2030	thrombomodulin	2.7
	439659	AW970780	Hs.59483	Homo sapiens cDNA FLJ14471 fs, clone MA	2.7
	443932	AW888222	Hs.9973	tensin	2.7
	444930	BE185536	Hs.301183	molecule possessing ankyrin repeats Indu	2.7
	419269	AA235838		gb:zs41b04.s1 Soares NhhMPu_S1 Homo sapi	2.7
75	416004	D11880	Hs.299254	Homo sapiens cDNA: FLJ23597 fs, clone L	2.7
	430371	D87466	Hs.240112	KIAA0276 protein	2.7
	449117	AW449310	Hs.210262	ESTs, Weakly similar to HSS2_HUMAN HEPAR	2.7
	451007	H38108	Hs.32759	ESTs	2.7
80	421202	AF193339	Hs.102506	eukaryotic translation initiation factor	2.7
	406308			NM_025192:Homo sapiens hypothetical prot	2.7
	413208	BE071799		gb:RC0-BT0522-071299-011-b10 BT0522 Homo	2.7
	421420	AJ024236	Hs.123296	ESTs, Weakly similar to PEC1_HUMAN PLATE	2.7
	445693	AW800444	Hs.76507	LPS-induced TNF-alpha factor	2.7

	452351	AA025647		gb:ze85d01.r1 Soares_fetal_heart_NbFH19W	2.7
	410538	AW753115		gb:PMO-CT0248-131099-001-h12 CT0248 Homo	2.7
	448072	AA59306	Hs.24908	ESTs	2.7
5	420912	AW853156	Hs.90787	ESTs	2.7
	453830	AA534296	Hs.20953	ESTs	2.7
	457791	AW117431	Hs.191906	ESTs	2.7
	417735	AA188175	Hs.82506	KIAA1254 protein	2.7
	411773	NM_006799	Hs.72026	protease, serine, 21 (testisin)	2.7
10	417076	AW973454	Hs.238442	ESTs, Moderately similar to ALU7_HUMAN A	2.7
	436476	AA326108	Hs.33829	bHLH protein DEC2	2.7
	440945	AW505345	Hs.7540	I-box and leucine-rich repeat protein 3A	2.7
	425826	U97698		mucin 6, gastric	2.7
	422795	AB033109	Hs.120866	KIAA1283 protein	2.7
15	433921	AA618174		gb:zq14d01.s1 NCI_CGAP_Thy1 Homo sapiens	2.7
	414272	AI651603	Hs.46988	ESTs	2.7
	418047	R37633	Hs.4847	ESTs	2.7
	421089	AB037771	Hs.101799	KIAA1350 protein	2.7
	419763	AI039691	Hs.127488	ESTs	2.7
20	459265	AJ003616		gb:AJ003616 Selected chromosome 21 cDNA	2.7
	410970	AW812151		gb:RCS-ST0178-081099-011-A06 ST0178 Homo	2.7
	401925	N98378		sialyltransferase 1 (beta-galactoside 4)	2.7
	418504	BE159718	Hs.85335	Homo sapiens mRNA; cDNA DKFZp564D1462 (f	2.6
	433789	AA220977		gb:zr01a08.r1 Stratagene NT2 neuronal pr	2.6
25	418308	AA215738	Hs.182514	ESTs, Weakly similar to A46010 X-linked	2.6
	444618	AV653785	Hs.173334	ELL-RELATED RNA POLYMERASE II, ELONGATIO	2.6
	406299			Target Exon	2.6
	422963	M79141	Hs.13234	ESTs	2.6
	441244	BE612935	Hs.184052	PP1201 protein	2.6
30	439954	AL046748	Hs.6790	DnaJ (Hsp40) homolog, subfamily B, membe	2.6
	405088			Target Exon	2.6
	404741			Target Exon	2.6
	451927	AL355687	Hs.27261	Homo sapiens mRNA full length insert cDN	2.6
	439103	AF085959	Hs.38705	ESTs	2.6
35	437241	AL137318	Hs.306450	Homo sapiens mRNA; cDNA DKFZp434L171 (fr	2.6
	442379	NM_004613	Hs.8265	transglutaminase 2 (C polypeptide, prote	2.6
	457394	M86528	Hs.266902	neurotrophin 5 (neurotrophin 4/5)	2.6
	427229	AI799751	Hs.5635	ESTs	2.6
	414630	BE410857	Hs.16064	gb:601301177F1 NIH_MGC_21 Homo sapiens c	2.6
40	406744	AA554082	Hs.279860	tumor protein, translationally-controlled	2.6
	443984	AM24415	Hs.143719	ESTs	2.6
	421221	AW276914	Hs.326714	Homo sapiens clone IMAGE:713177, mRNA se	2.6
	421709	AA159394	Hs.107056	CED-6 protein	2.6
	426747	AA535210	Hs.171996	kallikrein 3, (prostate specific antigen	2.6
45	439480	AL038511	Hs.125316	ESTs, Weakly similar to S33990 finger pr	2.6
	419567	AW339890	Hs.128187	ESTs	2.6
	421922	AW295043	Hs.109590	genethonin 1	2.6
	421859	AA356620	Hs.108947	KIAA0050 gene product	2.6
	431441	U81961	Hs.2794	sodium channel, nonvoltage-gated 1 alpha	2.6
50	444843	AA400172		gb:zu69e01.r1 Soares_testis_NHT Homo sap	2.6
	416729	U48165	Hs.1027	Ras-related associated with diabetes	2.6
	439238	N47305	Hs.302161	ESTs	2.6
	439183	AW970600	Hs.303261	ESTs	2.6
	408739	W01556	Hs.238797	ESTs, Moderately similar to I38022 hypot	2.6
55	412061	AA833763	Hs.330211	ESTs	2.6
	432114	AL036021	Hs.8934	ESTs	2.6
	425337	AA355442	Hs.169054	ESTs	2.6
	424299	AK000377	Hs.82294	homolog of mouse C2PA	2.6
60	448871	BE816709	Hs.169265	kruppel-related zinc finger protein hckr	2.6
	414516	AI307802	Hs.135560	ESTs, Weakly similar to T43458 hypotheti	2.6
	456235	AA203637		gb:zx58b12.r1 Soares_fetal_liver_spleen_	2.6
	410429	AA310600	Hs.63657	peptide:N-glycanase similar to yeast PNG	2.6
	449251	AW151660	Hs.31444	ESTs	2.6
	436546	AW023329	Hs.132743	ESTs	2.6
65	450546	AA010200	Hs.175551	ESTs	2.6
	437255	R58970	Hs.9887	ESTs	2.6
	409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA119	2.6
	427983	M17706	Hs.2233	colony stimulating factor 3 (granulocyte	2.5
	413341	H78472	Hs.191325	ESTs, Weakly similar to T18967 hypotheti	2.5
	423763	R98203	Hs.132724	nuclear transcription factor Y, alpha	2.5
70	413282	BE078159		gb:CM9-BT0615-140200-175-e06 BT0615 Homo	2.5
	415590	T74068	Hs.170081	gb:zyc81d07.r1 Soares infant brain 1N18 H	2.5
	408215			Target Exon	2.5
	453938	AF082569	Hs.36794	D-type cyclin-interacting protein 1	2.5
	424310	AA338648	Hs.50334	testes development-related NYD-SP22	2.5
75	442097	AW015799	Hs.128474	ESTs	2.5
	456650	AA620501	Hs.108773	ESTs, Weakly similar to T42689 hypotheti	2.5
	413231	D87461	Hs.75244	BCL2-like 2	2.5
	457297	AW988188		gb:EST380383 MAGE resequences, MAGJ Homo	2.5
80	444942	AW293458	Hs.283807	chromosome 11 open reading frame 16	2.5
	425764	AW996009	Hs.112572	Homo sapiens cDNA FLJ14130 fs, clone MA	2.5
	435712	AA694607	Hs.176956	ESTs	2.5
	436624	T64297		fatty acid binding protein 1, liver	2.5
	443155	RS4485	Hs.23772	ESTs	2.5



5	425907	AA365752	Hs.155965	ESTs	2.5
	414759	AW295157	Hs.47587	ESTs	2.5
	414699	AJ815523	Hs.76930	synuclein, alpha (non A4 component of am	2.5
	411426	BE141714		gb:OVO-HT0101-061099-032-c04 HT0101 Homo	2.5
	404492			C80000677:gil10432400 emb CAC10290.1  (A	2.5
	425153	AW023193	Hs.27046	ESTs	2.5
	426372	BE304680	Hs.169531	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	2.5
	434803	AW974640	Hs.303413	ESTs	2.5
10	425694	U51333	Hs.159237	hexokinase 3 (white cell)	2.5
	433069	X76732	Hs.3164	nucleobindin 2	2.5
	428054	AJ948688	Hs.266619	ESTs	2.5
	424823	NM_006226	Hs.153322	phospholipase C, epsilon	2.5
	456972	AJ054347	Hs.2017	ribosomal protein L38	2.5
	431405	AJ470895	Hs.334895	ribosomal protein L10a	2.5
15	427982	NM_016156	Hs.181326	KIAA1073 protein	2.5
	412831	AA121352	Hs.143314	ESTs	2.5
	437114	AA836641	Hs.163085	ESTs	2.5
	426157	AA370977	Hs.345728	STAT induced STAT inhibitor 3	2.5
20	448786	BE048842	Hs.179075	Homo sapiens cDNA FLJ11881 fis, clone HE	2.5
	432251	AW972983	Hs.232165	polycythemia rubra vera 1; cell surface	2.5
	449239	T24653	Hs.23360	likely ortholog of yeast ARV1	2.5
	453572	AA382590	Hs.45366	KIAA0948 protein	2.5
25	TABLE 23B:				
	Pkey:	Unique Eos probe/seq identifier number			
	CAT number:	Gene cluster number			
	Accession:	Genbank accession numbers			
30	Pkey	CAT Number	Accession		
	408182	104479_1	AA047854 AA057506 AA053841		
	409856	1156268_1	AW502082 AW502979 AW502807 AW501876		
	410509	1206699_1	AW840743 AW752404 H43469		
	410538	1207341_1	AW753115 AW753113 R45779		
35	410786	1221083_1	AW803340 AW803280 AW803275 AW803415 AW803343 AW803422		
	410970	1228131_1	AW812151 AW812186 AW812166		
	411426	1245515_1	BE141714 AW845993 AW845989		
	411906	1265204_1	AW875765 H50294 AW875444		
	412636	13165_1	NM_004415 AL031058 M77830 BE149760 AW752599 AW848723 AW376697 AW376817 AW376699 AW848371 AW376782 AW848789 AW361413		
40			AW849074 AW997139 AW799304 AW799309 BE077020 BE077017 BE185187 AW997196 BE156621 BE179915 BE006561 BE143155 AW890985		
			BE002107 AW103521 AA857316 AW383133 BE011378 AW170253 BE185750 AW886475 BE160433 JO5211 BE082576 BE082584 BE004047		
			AW607238 AW377700 AW377699 BE082526 BE082505 BE082507 BE082514 AW178000 AW177933 AJ905935 AW747877 AW748114 BE148516		
			AW265328 AW847678 AW847688 AW365151 AW365148 AW365153 AW365156 AW365175 AW365157 AW365154 AW068840 BE005272 AW365145		
			BE001925 BE182166 BE144243 BE001923 AJ951766 AM34518 BE184920 BE184933 A1284090 BE184941 AW804674 BE184924 CD4715 W39488		
45			AW995615 BE184948 BE159646 AW606653 AA099891 AA131128 AA337270 AA340777 AW384371 AA852212 R58704 AW366566 AW364859		
			AA025851 AA025852 AA455100 AA719958 AW352220 AW996245 BE165351 BE073487 AA377127 AW890264 AW609750 AW391912 AW849690		
			T87267 AW853812 AA852213 W74149 BE009090 AA056401 H91011 AW368529 AW390272 C18467 AW674920 N57176 AA026480 AW576767		
			H93284 AA026863 AW177787 AA026654 AW177788 BE092134 BE092137 BE092136 AW177784 A1022862 BE091653 AW376811 AW848592		
			AA040018 BE185331 BE182164 AA368564 AW951578 T29918 AA131077 W95048 W25458 AW205789 H90899 N29754 W32490 R20904 BE167181		
50			BE167165 H84767 H27408 H30146 AJ190590 C03378 A1554403 AJ205263 AA128470 AJ392926 AF139065 AW370813 AW370827 AW798417		
			AW798780 AW798883 AW798569 R33557 AA149190 C03029 AW177783 AA088866 AW370829 AA247685 BE002273 AJ760816 AA439101 AW879451		
			AJ700963 AA451923 AJ340326 AJ590975 T48793 A1568096 AJ142882 AA039975 AJ470146 AA946936 BE067737 BE067785 W19287 AA644381		
			AA702424 AJ417612 AJ305554 AJ686869 AJ568892 AW190555 A1571075 AJ220573 AA056527 AJ471874 AJ304772 AWS17828 AJ915596 A1627383		
			AJ270345 AW021347 AW166807 AW105614 AJ346078 AA552300 W95070 AJ494069 AJ911702 AA149191 AA026864 A1830049 AJ887258 AW780435		
55			AJ910434 AJ819984 A1858282 AJ078449 AJ025932 AJ860584 AJ635878 AA026047 AA703232 D12062 AW192085 AA658154 AW514597 AW591892		
			T87181 AA782066 AW243815 AW150038 AW268383 AW004633 AJ927207 AA782109 AW473233 AJ804485 AW169216 A1572669 AA602182		
			AW015480 AW771865 AJ270027 AA961816 AA283207 AJ076982 AJ498487 AJ348053 AJ783914 H444005 AW799118 AA128330 AA515500 AA918281		
			W02156 AJ905927 AA022701 W38382 R20795 T77861 AW860878		
60	413208	1353610_1	BE071799 BE071804 BE071798		
	413266	1356260_1	BE300352 BE299274 BE075351 BE297444		
	413282	1358147_1	BE078159 BE078276 BE078163 BE078277 BE078279 BE078158		
	413493	1373555_1	BE144444 BE144430		
	415606	1540470_1	W70022 R35201 F12763 T74725 H63485 Z45782 H61126		
	415666	1543492_1	H72693 R08673 H72694 F20990 R08580		
65	416233	158010_1	AA176633 AW961842 AA309418		
	419269	183444_1	AA235838 BE180775		
	419386	184356_1	AA236887 AA237066 AA354236 AW957759 H08961		
	425826	25682_1	U97698 AW815264 AJ791966 AJ732669 AA588236 AJ521662 AJ804760 AJ955717 AW292169 AJ468227 AJ420483 AA603459 AJ868225 AJ919551		
	431300	331217_1	AA502346 BE159863		
	433789	37421_1	AA220977 AF091029 AA701227		
70	433921	377350_1	AA618174 AJ114549 R36464 R36465		
	436624	4237_5	T64297 AA894931 NM_001443 M10050 AW843109 AJ698516 T53219 T48785 T64166 AA706930 R29613 T55913 T56518 T64679 R29666 M10617		
			AJ768596 AA101894 W90338 AJ742193 AW752206 AA099433 T53220 AW082135 AW272775 T29562 T55862 AJ343047 AJ345671 T68235 T68121		
			AW842284		
75	444843	62260_1	AA400172 AA400146 AV651691		
	445797	650943_1	A1253414 AJ366014 R34822		
	447135	70963_1	T58148 AW516579 AW059603		
	449901	818599_1	AJ574072 BE268487		
	450928	851593_1	AJ744417 R91814 H77365		
	452351	91233_1	AA025647 R45716 AW753786		
80	455040	1250028_1	AW852286 AW851934 AW852096 AW852274		
	458235	168688_1	AA203637 AA832266 H67452		
	457297	313764_1	AW968188 AA468196 AA468269 AA468298		
	459265	966590_1	AJ003616 AJ003654 AJ003617		

TABLE 23C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
400985	7770576	Minus	173043-173564
401507	7534110	Plus	71055-71259
401600	4388746	Minus	27363-27518,28727-28891,29526-29731
401783	7249190	Plus	139369-139827,140509-140591,140834-140990,141496-141657,141757-141882,142063-142283
401925	3892083	Minus	138252-138469,140239-140354,140437-140598,141037-141193,141925-142007,142787-143230
402198	8576116	Plus	79041-79191
402364	9454515	Minus	54983-55240,56507-56785,56982-57365
402429	9796372	Minus	57622-57793,59282-59402,59624-59827
403442	7210003	Plus	174560-175270
403469	9929739	Minus	4831-7707
403488	9966615	Minus	12450-12753
403512	7656757	Minus	114487-114610
403890	7710561	Plus	83165-83350
404036	8567760	Minus	65247-67529,112537-114863
404091	7684554	Minus	82121-83229
404333	9802821	Minus	137948-138024,138111-138300
404492	8123400	Minus	138612-138803
404559	8748893	Minus	73499-73651,89575-89739
404606	9212936	Minus	22310-23269
404661	9797073	Plus	33374-33675,33769-34008
404741	8574139	Plus	143025-143467
404845	7958980	Minus	47174-47326,52928-53146,53312-53602
405088	8072518	Minus	115690-117621
405354	2642452	Plus	52213-53089
405403	6850244	Minus	37491-37670,40951-41031
405474	8439781	Plus	172005-172175
405586	5002511	Plus	38810-39017
405670	4662655	Plus	96543-96870
405674	4589984	Plus	68302-68429
406085	9123888	Plus	18665-18843
406215	7342161	Plus	310-432
406270	7534217	Plus	13136-13591
406299	5686278	Minus	35655-36119
406308	9211532	Plus	358408-358651

TABLE 24A: ABOUT 1260 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT TISSUES

Table 24A lists about 1260 genes up-regulated in glioblastoma compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult tissues was greater than or equal to 2.5. The "average" glioblastoma level was set to the 75<sup>th</sup> percentile amongst various glioblastoma tumors. The "average" normal adult tissue level was set to the 85<sup>th</sup> percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75<sup>th</sup> percentile tumor to 85<sup>th</sup> percentile normal body tissue

Pkey	ExAccn	UnigeneID	Unigene Title	R1
431917	D16181	Hs.2868	peripheral myelin protein 2	75.2
427343	A880044	Hs.176977	protein kinase C binding protein 2	74.6
455601	A1368680	Hs.816	SRY (sex determining region Y)-box 2	74.2
428321	A1699994	Hs.2868	peripheral myelin protein 2	71.6
412719	AW016610	Hs.129911	ESTs	70.7
449494	AW237014	Hs.315369	Homo sapiens cDNA: FLJ23075 fls, clone L	66.3
415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	64.3
413472	BE242870	Hs.75379	solute carrier family 1 (glial high affi	60.1
456759	BE259150	Hs.127792	delta (Drosophila)-like 3	52.3
435147	AL133731	Hs.4774	Homo sapiens mRNA; cDNA DKFZp761C1712 (I	46.7
425842	A1587490	Hs.159623	NK-2 (Drosophila) homolog B	40.1
412733	AA984472	Hs.74554	KIAA0080 protein	39.0
418375	NM_003081	Hs.84389	synaptosomal-associated protein, 25kD	38.7
453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	37.2
423849	AL157425	Hs.133315	Homo sapiens mRNA; cDNA DKFZp761J1324 (I	36.8
413333	M74028	Hs.75297	fibroblast growth factor 1 (acidic)	32.8
416829	AB013805	Hs.80220	catenin (cadherin-associated protein), d	31.8
431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fls, clone CO	31.8
436878	BE465204	Hs.47448	ESTs	31.4
426325	D28114	Hs.169309	myelin-associated oligodendrocyte basic	30.9
425057	AA826434	Hs.1619	achaete-scute complex (Drosophila) homol	30.4
446711	AF169692	Hs.12450	protocadherin 9	30.2
439415	F05538	Hs.12825	ESTs	28.3
430838	N46664	Hs.169395	hypothetical protein FLJ12015	26.9
429466	M85835	Hs.12827	ESTs	25.9

	447004	AW296968	Hs.157539	ESTs	25.3
	424581	M62062	Hs.150917	catenin (cadherin-associated protein), a	24.8
	452744	AJ267652	Hs.30504	Homo sapiens mRNA; cDNA DKFZp434E082 (tr	24.8
5	441285	NM_002374	Hs.167	microtubule-associated protein 2	24.3
	453642	AJ370936	Hs.34074	dipeptidylpeptidase VI	24.3
	424140	Z48051	Hs.141308	myelin oligodendrocyte glycoprotein	24.2
	450133	AW969769	Hs.105201	ESTs	24.2
	408562	AJ436323	Hs.31141	Homo sapiens mRNA for KIAA1568 protein,	23.3
10	448672	AJ955511	Hs.225106	ESTs	22.7
	435708	AJ362949	Hs.75169	ESTs	22.0
	407034	U84540		gb:Human dystrobrevin isoform OTN-3 (DTN	21.9
	407168	R45175	Hs.117183	ESTs	21.7
	431019	NM_005249	Hs.2714	forkhead box G1B	21.5
15	409049	AJ423132	Hs.146343	ESTs	21.4
	433896	AW294729	Hs.274461	ESTs	21.1
	445041	T64183	Hs.282982	solute carrier	21.0
	418738	AW388633	Hs.6682	solute carrier family 7, (cationic amino	20.4
	444378	R41339	Hs.12569	ESTs	20.0
20	411305	BE241596	Hs.69547	myelin basic protein	19.9
	437414	AW894071	Hs.48448	hypothetical protein DKFZp547C176	19.8
	441016	AW138653	Hs.25845	ESTs	19.6
	440435	AL042201	Hs.21273	transcription factor NYD-sp10	18.5
	438209	AL120659	Hs.6111	aryl-hydrocarbon receptor nuclear transi	18.4
25	452461	N78223	Hs.108106	transcription factor	18.1
	409395	U46745	Hs.54435	dystrobrevin, alpha	18.1
	417183	RS2089	Hs.172717	ESTs	18.0
	409638	AW450420	Hs.21335	ESTs	18.0
	428392	H10233	Hs.2265	secretory granule, neuroendocrine protel	18.0
30	449611	AJ970394	Hs.197075	ESTs	17.0
	446692	Z44514	Hs.156829	Homo sapiens mRNA for KIAA1763 protein,	16.9
	425088	AA663372	Hs.169395	hypothetical protein FLJ12015	16.9
	444471	AB020684	Hs.11217	KIAA0877 protein	16.8
	421659	NM_014459	Hs.106511	protocadherin 17	16.7
35	431725	X65724	Hs.2839	Norio disease (pseudoglioma)	16.6
	429276	AF056085	Hs.198812	G protein-coupled receptor 51	16.6
	416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	16.5
	441440	AJ807981	Hs.30495	ESTs	15.7
	449433	AJ672096	Hs.9012	ESTs, Weakly similar to S26650 DNA-bindi	15.7
40	421264	AL039123	Hs.103042	microtubule-associated protein 1B	15.5
	415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	15.3
	413597	AW302885	Hs.117183	ESTs	15.1
	424945	AJ221919	Hs.173438	hypothetical protein FLJ10582	14.9
	447414	D82343	Hs.18551	neuroblastoma (nerve tissue) protein	14.9
45	426269	H15302	Hs.168950	Homo sapiens mRNA; cDNA DKFZp566A1046 (I	14.8
	416857	AA188775	Hs.292453	ESTs	14.7
	419721	NM_001650	Hs.288650	aquaporin 4	14.6
	411078	AJ222020	Hs.182364	CocoaCrisp	14.4
	453924	R49295	Hs.24888	ESTs	14.4
50	409389	AB007979	Hs.301281	Homo sapiens mRNA, chromosome 1 specific	14.3
	430130	AL137311	Hs.234074	Homo sapiens mRNA; cDNA DKFZp781G02121 (	14.1
	410909	AW898161	Hs.53112	ESTs, Moderately similar to ALUB_HUMAN A	14.0
	412266	N59006	Hs.26133	ESTs	14.0
	412986	X81120	Hs.75110	cannabinoid receptor 1 (brain)	14.0
55	424790	AL119344	Hs.13326	ESTs, Weakly similar to 2004399A chromos	14.0
	439239	AJ031540	Hs.235331	ESTs	14.0
	441497	RS1064	Hs.23172	ESTs	14.0
	445495	BE622641	Hs.38489	ESTs, Weakly similar to I38022 hypothe	14.0
	414245	BE148072	Hs.75850	WAS protein family, member 1	13.7
60	429900	AA460421	Hs.30875	ESTs	13.6
	448595	AB014544	Hs.21572	KIAA0644 gene product	13.6
	449605	AW138581	Hs.198418	ESTs	13.6
	452526	W38537	Hs.280740	hypothetical protein MGC3040	13.6
	420547	AF155140	Hs.98738	gonadotropin-regulated testicular RNA he	13.3
65	441350	AB020690	Hs.7782	paraneoplastic antigen MA2	13.3
	420077	AW512260	Hs.87767	ESTs	13.2
	424120	T80579	Hs.290270	ESTs	13.2
	456965	AW131888	Hs.172792	ESTs, Weakly similar to hypothetical pro	13.2
	423361	AW170055	Hs.47628	ESTs	13.1
70	428409	AW117207	Hs.98523	ESTs	12.9
	417160	N76497	Hs.1787	proteolipid protein 1 (Pefizeus-Merzbac	12.6
	451621	AJ879148	Hs.26770	fatty acid binding protein 7, brain	12.5
	411379	AJ816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	12.5
	436954	AA740151	Hs.130425	ESTs	12.4
75	430691	C14187	Hs.103538	ESTs	12.4
	433551	AJ985544	Hs.12450	protocadherin 9	12.4
	422544	AB018259	Hs.118140	KIAA0716 gene product	12.2
	427540	R12014	Hs.20976	ESTs	12.1
	435624	AF218942	Hs.24889	fornin 2	12.1
80	415849	R20529	Hs.6806	ESTs	12.1
	428845	AL157579	Hs.153610	KIAA0751 gene product	11.9
	442671	AJ005668	Hs.134779	EST	11.9
	444396	T65213	Hs.4257	ESTs	11.8
	452752	AW044058	Hs.33578	KIAA0820 protein	11.8

5	425523	AB007948	Hs.158244	KIAA0479 protein	11.8
	416072	AL110370	Hs.79000	growth associated protein 43	11.7
	440184	AB002297	Hs.7022	dedicator of cyto-kinesis 3	11.7
	428976	AL037824	Hs.194695	ras homolog gene family, member 1	11.6
	444783	AK001468	Hs.62180	anillin (Drosophila Scrapie homolog), act	11.6
	448299	AA497044	Hs.20887	hypothetical protein FLJ10392	11.6
	414214	D49958	Hs.75819	glycoprotein M6A	11.5
	428982	NM_005097	Hs.194704	leucine-rich, glioma inactivated 1	11.5
10	405238				11.4
	420362	U79734	Hs.97206	huntingtin interacting protein 1	11.4
	422980	N46569	Hs.76722	CCAAT/enhancer binding protein (C/EBP),	11.4
	424918	R13982	Hs.169309	myelin-associated oligodendrocyte basic	11.4
	434277	X77748	Hs.3786	glutamate receptor, metabotropic 3	11.4
15	451952	AL120173	Hs.301663	ESTs	11.4
	408829	NM_006042	Hs.48384	heparan sulfate (glucosamine) 3-O-sulfot	11.3
	424278	AK000723	Hs.144517	hypothetical protein FLJ20716	11.3
	429418	AI381028	Hs.118769	ESTs	11.3
	429918	AW873986	Hs.119383	ESTs	11.3
20	443912	R37257	Hs.184780	ESTs	11.3
	448743	AB032962	Hs.21896	KIAA1136 protein	11.3
	420092	AA814043	Hs.88045	ESTs	11.2
	408081	AW451597	Hs.167409	ESTs	11.2
	411642	NM_014932	Hs.71132	neurodin 1	10.9
25	415170	R44386	Hs.164578	ESTs	10.9
	426320	W47595	Hs.169300	transforming growth factor, beta 2	10.8
	450568	AL050078	Hs.25159	Homo sapiens cDNA FLJ110784 fs, clone NT	10.8
	425799	T08133	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,	10.8
	423853	AB011537	Hs.133466	slit (Drosophila) homolog 1	10.7
30	400293	N51002	Hs.306480	Homo sapiens mRNA; cDNA DKFZp761E2112 (f	10.7
	447773	AA23930	Hs.36790	ESTs, Weakly similar to putative p150 (H	10.7
	448321	NM_005883	Hs.20912	adenomatous polyposis coli like	10.5
	448533	AL119710	Hs.21365	nucleosome assembly protein 1-like 3	10.5
	440684	AI253123	Hs.127356	ESTs, Highly similar to S21424 nestin (H	10.3
35	444017	U04840	Hs.214	neuro-oncological ventral antigen 1	10.3
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BENAB/b	10.3
	440471	AA886146	Hs.307944	ESTs	10.2
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	10.1
	439978	BE139460	Hs.124673	Homo sapiens cDNA FLJ111477 fs, clone HE	10.1
40	448902	Z45998	Hs.22543	Homo sapiens mRNA; cDNA DKFZp76111912 (f	10.1
	424932	R14070	Hs.315369	Homo sapiens cDNA: FLJ23075 fs, clone L	9.9
	431721	AB032996	Hs.269044	KIAA1170 protein	9.9
	419088	AI538323	Hs.52620	Integrin, beta 8	9.8
	420602	AF060877	Hs.99236	regulator of G-protein signalling 20	9.8
45	436511	AA721252	Hs.291502	ESTs	9.8
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	9.7
	449539	W80363	Hs.58445	ESTs	9.7
	412959	D87458	Hs.75090	KIAA0282 protein	9.6
	412811	H06382	Hs.21400	ESTs	9.6
50	449300	AI656959	Hs.222165	ESTs	9.6
	426344	H41821	Hs.322469	transcriptional activator of the c-fos p	9.5
	419271	N34901	Hs.238532	ESTs	9.5
	419078	M93119	Hs.89584	insulinoma-associated 1	9.4
	451516	AI800515	Hs.12024	ESTs	9.4
55	422656	AI870435	Hs.1569	LIM homeobox protein 2	9.3
	449318	AW235021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	9.3
	414175	AI308876	Hs.103849	hypothetical protein DKFZp761D112	9.3
	415279	F04237	Hs.1447	glial fibrillary acidic protein	9.2
	428784	Y12851	Hs.183470	purinergic receptor P2X, ligand-gated io	9.2
60	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su	9.2
	424641	AB001106	Hs.151413	glia maturation factor, beta	9.1
	417435	NM_005181	Hs.82129	carbonic anhydrase III, muscle specific	9.1
	449448	D60730	Hs.57471	ESTs	9.1
	408508	AI806109	Hs.135736	KIAA1580 protein	9.0
65	452785	AL359942	Hs.296434	erythroid differentiation and denudead	9.0
	448986	H42169	Hs.18653	hypothetical protein FLJ14627	8.9
	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	8.9
	433800	AI034361	Hs.135150	lung type-I cell membrane-associated gly	8.9
	408928	AF217525	Hs.49002	Down syndrome cell adhesion molecule	8.8
70	449625	NM_014253	Hs.23796	odc (odd Oz/ten-m, Drosophila) homolog 1	8.8
	400292	AA250737	Hs.72472	ESTs	8.7
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	8.7
	420345	AW295230	Hs.25231	ESTs	8.7
	429927	NM_001115	Hs.2522	adenylate cyclase 8 (brain)	8.7
75	437528	NS9646	Hs.169745	crumbs (Drosophila) homolog 1	8.7
	440152	AB002378	Hs.7006	KIAA0378 protein	8.7
	451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	8.6
	400780				8.6
	434891	AA814309	Hs.123583	ESTs	8.6
	449277	AA001064	Hs.172976	ESTs	8.6
80	415709	AA649850	Hs.278558	ESTs	8.5
	439947	AB006627	Hs.6788	astrotactin	8.5
	447197	R36075		gbyh88b01.s1 Soares placenta Nb2HP Homo	8.5
	433042	AW193534	Hs.281895	Homo sapiens cDNA FLJ11660 fs, clone HE	8.4

5	416370	N90470	Hs.203697	ESTs, Weakly similar to I38022 hypothe	8.4
	452785	R61362	Hs.106642	ESTs, Weakly similar to T09052 hypothe	8.4
	415795	R87548	Hs.78854	ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, beta 2 poly	8.3
	426271	AF026547	Hs.169047	chondroitin sulfate proteoglycan 3 (neur	8.3
	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKFZp564N1662 (I	8.3
	419863	AW952691	Hs.93485	Homo sapiens mRNA; cDNA DKFZp761D191 (h	8.3
	433447	U29195	Hs.3281	neuronal pentraxin II	8.3
	431467	N71831	Hs.256398	Homo sapiens mRNA; cDNA DKFZp434E0528 (I	8.3
10	409327	L41162	Hs.53563	collagen, type IX, alpha 3	8.3
	414300	AJ304870	Hs.188680	ESTs	8.2
	407728	AW071502	Hs.175931	ESTs	8.2
	422798	R92347	Hs.34574	ESTs, Weakly similar to ALU1_HUMAN ALU S	8.2
	419704	AA429104	Hs.45067	ESTs	8.2
15	429007	D80642		gb:HUM092E098 Human fetal brain (TFujiwa	8.1
	442710	AJ015631	Hs.23210	ESTs	8.1
	425048	H05468	Hs.164502	ESTs	8.1
	429149	AW183360	Hs.197962	ESTs, Weakly similar to I38022 hypothe	8.0
	445740	T78281	Hs.13226	Homo sapiens clone 25181 mRNA sequence	8.0
20	418771	AA807881	Hs.25329	ESTs	7.9
	422728	AW937826	Hs.103262	ESTs, Weakly similar to ZN91_HUMAN ZINC	7.9
	425984	AW836277	Hs.165636	hypothetical protein DKFZp761C07121	7.9
	448408	AA322866	Hs.21107	neurofilin	7.9
	455364	H72176	Hs.4273	hypothetical protein FLJ13159	7.9
25	446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	7.9
	435501	AW051819	Hs.129908	KIAA0591 protein	7.8
	423600	AJ633559	Hs.310359	ESTs	7.8
	450625	AW970107		gb:EST382188 MAGE resequences, MAGK Homo	7.8
	415314	N88802	Hs.5422	glycoprotein M6B	7.7
30	420036	R60336	Hs.52792	Homo sapiens mRNA; cDNA DKFZp586I1823 (I	7.7
	427687	AW003867	Hs.1570	histamine receptor H1	7.7
	449328	AJ962493	Hs.197647	ESTs	7.7
	419249	X14767	Hs.89768	gamma-aminobutyric acid (GABA) A recepto	7.7
	407896	D76435	Hs.41154	Zic family member 1 (odd-paired Drosophi	7.7
35	419103	Z40229	Hs.96423	hypothetical protein FLJ23033	7.6
	438779	NM_003787	Hs.6414	nucleolar protein 4	7.6
	433532	AW975367		gb:EST387475 MAGE resequences, MAGN Homo	7.6
	448555	AJ536697	Hs.159863	ESTs	7.5
	439662	H97552	Hs.269060	ESTs	7.5
40	448543	AW897741	Hs.21380	Homo sapiens mRNA; cDNA DKFZp586P1124 (I	7.5
	410099	AA081630	Hs.169387	KIAA0036 gene product	7.5
	431592	R69016	Hs.213194	hypothetical protein MGC10895	7.4
	409731	AA125985	Hs.56145	thymosin, beta, identified in neuroblast	7.4
	405819				7.4
45	407886	AW969688	Hs.100826	ESTs	7.4
	437416	AL359605	Hs.283851	Homo sapiens mRNA; cDNA DKFZp547G036 (fr	7.4
	437698	R61837	Hs.7990	ESTs, Moderately similar to I84505 calci	7.4
	408604	D51408	Hs.21925	ESTs	7.4
50	418506	AA084248	Hs.85339	G protein-coupled receptor 39	7.3
	447499	AW262580	Hs.147674	protocadherin beta 16	7.3
	454036	AA374756	Hs.93560	Homo sapiens mRNA for KIAA1771 protein,	7.3
	409746	NM_004794	Hs.56294	RAB33A, member RAS oncogene family	7.2
	410037	AB020725	Hs.58009	KIAA0918 protein	7.2
	419318	AW969742	Hs.291005	ESTs	7.2
55	424051	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (I	7.2
	442026	AJ243749	Hs.8074	brain-specific angiogenesis inhibitor 3	7.2
	448243	AW369771	Hs.52620	Integrin, beta 8	7.2
	436281	AW411194	Hs.85195	myeloid leukemia factor 1	7.2
	426429	X73114	Hs.169849	myosin-binding protein C, slow-type	7.2
60	407182	AA312551	Hs.230157	ESTs	7.1
	415293	R49462	Hs.106541	ESTs	7.1
	422764	AJ767727	Hs.47522	ESTs	7.1
	451592	AJ805416	Hs.213897	ESTs	7.1
65	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	7.0
	415734	NM_014747	Hs.78748	KIAA0237 gene product	7.0
	434149	Z43829	Hs.19574	hypothetical protein MGC5469	7.0
	436726	AA324975	Hs.128993	ESTs, Weakly similar to T00079 hypothe	7.0
	417632	R20855	Hs.5422	glycoprotein M6B	7.0
	422421	AA325138	Hs.235873	hypothetical protein FLJ22672	6.9
70	435267	N23797	Hs.110114	ESTs	6.9
	437117	AL049256	Hs.122593	ESTs	6.9
	445523	Z30118	Hs.293788	ESTs, Moderately similar to unnamed prot	6.9
	445900	AF070526	Hs.13429	Homo sapiens clone 24787 mRNA sequence	6.9
	445745	AB007924	Hs.13245	KIAA0455 gene product	6.9
75	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	6.9
	428588	F12101	Hs.185701	Homo sapiens mRNA full length insert cDN	6.8
	421723	AA620400	Hs.300717	sodium channel, voltage-gated, type III,	6.8
	447342	AJ199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	6.7
	443297	AJ049864	Hs.133029	ESTs	6.7
80	443992	AW022228	Hs.322922	ESTs	6.7
	453098	AW294631	Hs.11325	ESTs	6.7
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	6.7
	443761	AJ525743	Hs.160603	ESTs	6.6
	429609	AF002246	Hs.210863	cell adhesion molecule with homology to	6.6

5	435056	AW023337	Hs.5422	glycoprotein M6B	6.5
	453431	AF084754	Hs.32973	glycine receptor, beta	6.5
	444190	A1878918	Hs.10526	cysteine and glycine-rich protein 2	6.5
	418110	R43523	Hs.217754	hypothetical protein FLJ22202	6.5
	413988	M81883	Hs.324784	glutamate decarboxylase 1 (brain, 67kD)	6.5
	420805	L10333	Hs.99947	reficulin 1	6.4
	429125	AA446854	Hs.271004	ESTs, Weakly similar to I38022 hypotheti	6.4
	435256	AF193766	Hs.13872	cytokine-like protein C17	6.4
10	407866	AW088232	Hs.89506	paired box gene 6 (aniridia, keratitis)	6.3
	440700	AW952281	Hs.296184	guanine nucleotide binding protein (G pr	6.3
	427701	AA411101	Hs.243886	nuclear autoantigenic sperm protein (his	6.3
	422949	AA319435		gb:EST121657 Adrenal gland tumor Homo sap	6.2
	445102	AW204610	Hs.22270	ESTs	6.2
15	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	6.2
	435538	AB011540	Hs.4930	low density lipoprotein receptor-related	6.2
	410102	AW248508	Hs.279727	Homo sapiens cDNA FLJ14035 fs, clone HE	6.2
	416871	H98716		ghyx13d08.s1 Soares melanocyte 2NbmH Mo	6.1
	416702	AA186428	Hs.85591	ESTs	6.1
20	419347	C15944	Hs.90005	superiorocervical ganglia, neural specif	6.1
	424997	AL138167	Hs.96920	ESTs	6.1
	438660	U95740	Hs.6349	Homo sapiens, clone IMAGE:3010666, mRNA,	6.1
	453649	Y07494	Hs.34114	ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha 2 (*)	6.1
	449444	AW818436	Hs.23590	solute carrier family 16 (monocarboxylic	6.1
25	414117	W88559	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	6.0
	425517	AF121179		gb:AF121179 Homo sapiens liver (Chang L-	6.0
	427457	AW779105	Hs.164682	ESTs	6.0
	437034	AA742643		gbmy91c01.s1 NCI_CGAP_GC81 Homo sapiens	6.0
30	444170	AW613879	Hs.102408	ESTs	6.0
	457183	H91882	Hs.118569	Dvl-binding protein 1DAX (inhibition of	6.0
	448999	AF179274	Hs.22791	transmembrane protein with EGF-like and	6.0
	454048	H05626	Hs.6921	ESTs	6.0
	439772	AL365406	Hs.10268	Homo sapiens mRNA full length insert cDN	5.9
35	448944	AB014605	Hs.22599	atrophin-1 interacting protein 1; activi	5.9
	410011	AB020641	Hs.57856	PFTAIRE protein kinase 1	5.9
	415486	H12214	Hs.13284	ESTs, Weakly similar to 2109260A B cell	5.9
	438993	AA828996		gbod77b08.s1 NCI_CGAP_Ov2 Homo sapiens	5.9
	447350	AI375572	Hs.172634	ESTs	5.9
40	451783	R42554	Hs.210862	T-box, brain, 1	5.9
	447101	N72185	Hs.44189	ESTs	5.9
	440492	R39127	Hs.21433	hypothetical protein DKFZp547J036	5.9
	440274	R24595	Hs.7122	scrapie responsive protein 1	5.9
	438461	AW075485	Hs.285049	phosphoserine aminotransferase	5.9
45	418064	BE307287	Hs.83384	S100 calcium-binding protein, beta (neur	5.8
	437036	AI571514	Hs.133022	ESTs	5.7
	412225	AW902042		gb:QVO-NN1022-170400-193-c02 NN1022 Homo	5.7
	426342	AF093419	Hs.169378	multiple PDZ domain protein	5.7
	444218	AF070641	Hs.10684	Homo sapiens clone 24421 mRNA sequence	5.7
	445828	F05802	Hs.81907	ESTs	5.7
50	447198	D61523	Hs.283435	ESTs	5.7
	427897	NM_017413	Hs.303084	apefin, peptide ligand for APJ receptor	5.7
	448499	BE613280	Hs.77550	hypothetical protein MGC1780	5.7
	443672	AA323362	Hs.9667	butyrobetaine (gamma), 2-oxoglutarate di	5.6
	412155	R38167	Hs.12449	Homo sapiens transmembrane protein HTMP1	5.6
55	435718	R06569	Hs.269534	ESTs	5.6
	449340	AW235786	Hs.195359	hypothetical protein MGC10954	5.6
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	5.6
	451996	AW514021	Hs.245510	ESTs	5.6
	422411	AW749443	Hs.22511	ESTs	5.6
60	438328	AI492261	Hs.32450	ESTs	5.6
	433244	AB040943	Hs.271285	KIAA1510 protein	5.6
	435191	R15912	Hs.4817	Homo sapiens clone 24461 mRNA sequence	5.5
	418677	S83308	Hs.87224	SRY (sex determining region Y)-box 5	5.5
	400859				5.5
65	413625	AW451103	Hs.71371	ESTs	5.5
	421883	AI952677	Hs.108972	Homo sapiens mRNA: cDNA DKFZp434P228 (tr	5.5
	434833	RS1095	Hs.4276	KIAA1701 protein	5.5
	438702	AI879064	Hs.54618	ESTs	5.5
	452055	AI377431	Hs.141693	hypothetical protein MGC10858	5.5
70	430979	AI479755	Hs.129010	ESTs	5.5
	412709	AL022327	Hs.74518	KIAA0027 protein	5.5
	439920	H05430	Hs.288433	neurotrimin	5.5
	424343	AW956360	Hs.4748	adenylate cyclase activating polypeptide	5.4
	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	5.4
75	419235	AW470411	Hs.288433	neurotrimin	5.4
	418030	BE207573	Hs.83321	neuromedin B	5.4
	410330	AW023630	Hs.46786	ESTs	5.4
	410781	AI375672	Hs.165028	ESTs	5.4
	420658	AW965215	Hs.336656	ESTs	5.4
80	421308	AA687322	Hs.192843	leucine zipper protein FKSG14	5.4
	443740	R56434	Hs.21082	ESTs	5.4
	426457	AW894667	Hs.169965	chimerin (chimaerin) 1	5.4
	450375	AA009647	Hs.8850	a disintegrin and metalloproteinase doma	5.4
	412494	AL133900	Hs.792	ADP-ribosylation factor domain protein 1	5.4

5	426600	NM_003378	Hs.171014	VGF nerve growth factor inducible	5.4
	424432	AB037821	Hs.146858	protocadherin 10	5.4
	429250	H56585	Hs.198308	tryptophan rich basic protein	5.4
	443785	AW449952	Hs.190125	basic-helix-loop-helix-PAS protein	5.4
	436282	R91913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	5.4
	404584				5.3
	430091	AB032958	Hs.233023	KIAA1132 protein	5.3
	439845	AL355743	Hs.56663	Homo sapiens EST from clone 41214, full	5.3
10	424001	W67883	Hs.137476	paternally expressed 10	5.3
	425073	W39609	Hs.22003	solute carrier family 6 (neurotransmitter)	5.3
	426625	T78300	Hs.300642	serologically defined colon cancer antigen	5.3
	428137	AA421792	Hs.170999	ESTs	5.3
	428679	AA431765		gbzw80c03.s1 Soares_testis_NHT Homo sap	5.3
15	438176	AW138970	Hs.122113	ESTs	5.3
	440138	AB033023	Hs.318127	hypothetical protein FLJ10201	5.3
	451018	AW965599	Hs.247324	mitochondrial ribosomal protein S14	5.3
	416340	N31772	Hs.79226	fasciculation and elongation protein zeta	5.3
	435244	N77221	Hs.187824	ESTs	5.3
20	446035	NM_006558	Hs.13565	Sam68-like phosphotyrosine protein, T-ST	5.3
	424624	AB032947	Hs.151301	Ca2+-dependent activator protein for sec	5.3
	407748	AL079409	Hs.38176	KIAA0608 protein; SCN Circadian Oscillat	5.3
	430437	A1768801	Hs.169943	Homo sapiens cDNA FLJ13569 fs, clone PL	5.3
	414825	X06370	Hs.77432	epidermal growth factor receptor (avian)	5.2
	453941	U39817	Hs.36820	Bloom syndrome	5.2
25	424998	U58515	Hs.154138	chitinase 3-like 2	5.2
	423419	R55336	Hs.23539	ESTs	5.2
	424922	BE386547	Hs.217112	hypothetical protein MGC10825	5.2
	447359	NM_012093	Hs.18268	adenylate kinase 5	5.2
30	408206	AF041853	Hs.43670	kinesin family member 3A	5.2
	421013	M62397	Hs.1345	mutated in colorectal cancers	5.2
	429443	AB028967	Hs.202687	potassium voltage-gated channel, Shal-re	5.2
	434367	AB020700	Hs.3830	KIAA0893 protein	5.2
	444861	R46789	Hs.76118	ubiquitin carboxyl-terminal esterase L1	5.2
35	446142	A1754693	Hs.145968	ESTs	5.2
	448816	AB033052	Hs.22151	KIAA1226 protein	5.2
	451050	AW937420	Hs.69662	ESTs	5.2
	451106	BE382701	Hs.25960	v-myc avian myelocytomatosis viral relat	5.2
	439285	AL133916	Hs.172572	hypothetical protein FLJ20093	5.2
40	416737	AF154335	Hs.79691	LIM domain protein	5.2
	424800	AL035568	Hs.153203	MyoD family inhibitor	5.2
	443695	AW204099	Hs.337720	ESTs, Weakly similar to AF126780 1 retin	5.2
	415257	F03016	Hs.27513	ESTs	5.2
	433929	A1375499	Hs.27379	ESTs	5.1
45	415651	A1207162	Hs.3815	stathmin-like-protein RB3	5.1
	451027	AW519204	Hs.40808	ESTs	5.1
	409172	Z99399	Hs.118145	ESTs	5.1
	423343	AA324643	Hs.246106	ESTs	5.1
	429172	AA447417	Hs.285491	ESTs	5.1
50	437268	A1754847	Hs.227571	regulator of G-protein signalling 4	5.1
	451270	AW341392	Hs.235795	ESTs	5.1
	452904	AL157581	Hs.30957	Homo sapiens mRNA; cDNA DKFZp434E0626 (I	5.1
	420560	AW207748	Hs.59115	ESTs	5.1
	418097	R45137	Hs.21868	ESTs	5.1
55	442910	A1385130	Hs.11307	ESTs, Weakly similar to T19326 hypotheti	5.1
	434849	AW292765	Hs.8053	ESTs	5.1
	413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	5.1
	414217	A1309298	Hs.278898	Homo sapiens cDNA: FLJ23165 fs, clone L	5.1
	412068	S72043	Hs.73133	metallothionein 3 (growth inhibitory fac	5.0
60	413627	BE182082	Hs.246873	ESTs	5.0
	418661	NM_001949	Hs.1189	E2F transcription factor 3	5.0
	422438	AA445925	Hs.270896	ESTs, Moderately similar to Z195_HUMAN Z	5.0
	423728	AW891294	Hs.132136	solute carrier family 4, sodium bicarbon	5.0
	431431	AL096711	Hs.252953	Human DNA sequence from clone RP3-403A15	5.0
65	435087	AW975241	Hs.23567	ESTs	5.0
	452097	AB002364	Hs.27918	a disintegrin-like and metalloprotease (	5.0
	410434	AF051152	Hs.63668	toll-like receptor 2	4.9
	408692	AL040127	Hs.34074	dipeptidylpeptidase VI	4.9
	407808	AA663559	Hs.279789	histone deacetylase 3	4.9
70	418940	H17739	Hs.288513	Human DNA sequence from clone RP5-899C14	4.9
	425977	R15138	Hs.165570	Homo sapiens clone 25052 mRNA sequence	4.9
	426814	AF036943	Hs.172619	myelin transcription factor 1-like	4.9
	447112	H17800	Hs.7154	ESTs	4.9
	449574	F05048	Hs.175373	ESTs	4.9
75	453652	AW009640	Hs.28368	ESTs, Moderately similar to S65657 alpha	4.9
	423869	BE409301	Hs.134012	C1q-related factor	4.9
	413248	T64858	Hs.21433	hypothetical protein DKFZp547J036	4.9
	449176	A1633545	Hs.198072	ESTs	4.9
	448451	AW015994		gb:UH-H10p-abh-g-09-0-ULs1 NCL_CGAP_5	4.8
80	402904				4.8
	436039	AW023323	Hs.121070	ESTs	4.8
	448769	N66037	Hs.38173	ESTs	4.8
	423678	AW963357	Hs.7847	ESTs	4.8
	439451	AF086270	Hs.278554	heterochromatin-like protein 1	4.8

5	425870	R13406	Hs.56782	ESTs	4.8
	408777	U71204	Hs.47626	Ric (Drosophila)-like, expressed in neur	4.8
	413409	A638418	Hs.78580	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	4.8
	413823	AA825721	Hs.246973	ESTs	4.8
	417246	A1760098	Hs.21411	ESTs	4.8
	420900	AL045633	Hs.44269	ESTs	4.8
	424153	AA451737	Hs.141496	MAGE-like 2	4.8
	443539	A1076182	Hs.134074	ESTs, Moderately similar to ALLU6_HUMAN A	4.8
10	448750	U95020	Hs.21903	calcium channel, voltage-dependent, beta	4.8
	454030	AW021429	Hs.231980	ESTs	4.8
	424458	M29273	Hs.1780	myelin associated glycoprotein	4.8
	444119	R41231	Hs.184261	ESTs, Weakly similar to T26586 hypothesi	4.8
	407792	A1077715	Hs.39384	putative secreted ligand homologous to f	4.8
15	431462	AW583672	Hs.256311	granin-like neuroendocrine peptide precu	4.7
	431103	M57399	Hs.44	pleiotrophin (heparin binding growth fac	4.7
	429956	A1374651	Hs.22542	ESTs	4.7
	435060	AI422719	Hs.233349	ESTs, Weakly similar to fork head like p	4.7
	436203	BE384982	Hs.5076	Homo sapiens cDNA: FLJ22128 fs, clone H	4.7
20	448475	BE613134	Hs.247474	hypothetical protein FLJ21032	4.7
	422222	A1699372	Hs.193247	hypothetical protein DKFZp434A171	4.7
	431733	AW268410	Hs.21475	ESTs	4.7
	449353	AA001220	Hs.271369	ESTs	4.7
	452022	AW072330	Hs.293875	ESTs	4.7
25	454269	A1961050	Hs.129908	KIAA0591 protein	4.7
	404541				4.7
	428189	AA424030	Hs.46627	ESTs	4.7
	409125	R17268	Hs.259873	axonal transport of synaptic vesicles	4.7
	458435	A1418718	Hs.144121	ESTs, Weakly similar to T46916 hypothesi	4.6
30	425745	U44080	Hs.14427	Homo sapiens cDNA: FLJ21800 fs, clone H	4.6
	413492	D87470	Hs.75400	KIAA0280 protein	4.6
	419629	A8020695	Hs.91662	KIAA0888 protein	4.6
	407638	AJ404672	Hs.334483	hypothetical protein FLJ23571	4.6
	438140	W87355	Hs.269587	ESTs	4.6
35	439169	A1912122	Hs.41095	ESTs	4.6
	443150	A1034467	Hs.34650	ESTs	4.6
	451073	A1758905	Hs.206063	ESTs	4.6
	451659	BE379761	Hs.14248	ESTs	4.6
	452106	A1141031	Hs.21342	ESTs	4.6
40	451407	AA131376	Hs.326401	fibroblast growth factor 12B	4.6
	448765	R15337	Hs.21958	Homo sapiens mRNA: cDNA DKFZp547D086 (tr	4.6
	430147	R60704	Hs.234434	hair/enhancer-of-split related with YRP	4.6
	437204	AL110216	Hs.12285	ESTs, Weakly similar to ISS214 salivary	4.6
	431117	AF003522	Hs.250500	delta (Drosophila)-like 1	4.5
45	422175	N79885	Hs.6382	ESTs, Highly similar to T00391 hypothesi	4.5
	407889	R34556	Hs.30800	ESTs, Weakly similar to S65657 alpha-1C-	4.5
	419343	AA456245	Hs.85603	down-regulated by Ctnb1, a	4.5
	421790	AW896201	Hs.22654	sodium channel, voltage-gated, type I, a	4.5
	429399	AA452244	Hs.16727	ESTs	4.5
50	450149	AW969781	Hs.132863	Zic family member 2 (odd-paired Drosophi	4.5
	453118	AW195849	Hs.252757	ESTs	4.5
	443455	A8001025	Hs.9349	ryanodine receptor 3	4.4
	442613	A1004002	Hs.130522	Kv channel-interacting protein 1	4.4
	429843	AA455889	Hs.187279	FYVE-finger-containing Rab5 effector pro	4.4
55	416209	AA236776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	4.4
	418845	AA852985	Hs.89232	chromobox homolog 5 (Drosophila HP1 alpha	4.4
	435202	A1971313	Hs.170204	KIAA0551 protein	4.4
	437496	AA452378	Hs.170144	Homo sapiens mRNA: cDNA DKFZp547J125 (tr	4.4
	451254	A1571016	Hs.172967	ESTs	4.4
60	439039	A1656707	Hs.48713	ESTs	4.4
	439979	AW600291	Hs.5823	hypothetical protein FLJ10430	4.4
	441607	NM_005010	Hs.7912	neuronal cell adhesion molecule	4.4
	424983	A1742434	Hs.169911	ESTs	4.4
	410611	AW954134	Hs.20924	KIAA1628 protein	4.4
65	402605				4.4
	409248	A8033035	Hs.51965	KIAA1209 protein	4.4
	442222	A1061301	Hs.164773	ESTs	4.4
	454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	4.4
	454293	H49739	Hs.134013	ESTs, Moderately similar to HK61_HUMAN H	4.4
70	442832	AW206560	Hs.253569	ESTs	4.4
	407304	AA565832		gb:nj32b03.s1 NCI_CGAP_AA1 Homo sapiens	4.4
	423279	AW959861	Hs.290943	ESTs	4.3
	427194	AA399018	Hs.250835	ESTs	4.3
	419723	AL120193	Hs.92614	longevity assurance (LAG1, S. cerevisiae	4.3
75	445810	AW265700	Hs.155660	ESTs	4.3
	409734	BE161664	Hs.56155	hypothetical protein	4.3
	410389	AW954049	Hs.8177	ESTs, Weakly similar to PIHUB8 salivary	4.3
	411571	AA122293	Hs.70811	hypothetical protein FLJ20516	4.3
	433024	AA573847	Hs.26549	KIAA1708 protein	4.3
80	455202	AW085781	Hs.26270	hypothetical protein FLJ11588	4.3
	425264	AA353953	Hs.20369	ESTs, Weakly similar to gonadotropin ind	4.3
	416427	BE244050	Hs.79307	Rac/Cdc42 guanine exchange factor (GEF)	4.3
	431789	H18500	Hs.269222	mitogen-activated protein kinase 4	4.3
	444600	R41398	Hs.6996	ESTs	4.3



	454042	H22570	Hs.172572	hypothetical protein FLJ20093	4.3
	441899	AI372588	Hs.8022	TU3A protein	4.3
	425256	BE297611	Hs.155392	collapsin response mediator protein 1	4.3
5	410358	AW975168	Hs.13337	ESTs, Weakly similar to unnamed protein	4.2
	430291	AV660345	Hs.238126	CGI-49 protein	4.2
	433597	AA708205	Hs.100343	ESTs	4.2
	444127	N63620	Hs.13281	ESTs	4.2
	448507	AL133109	Hs.21333	Homo sapiens mRNA; cDNA DKFZp566N1047 (f	4.2
10	413589	AW452631	Hs.313803	ESTs, Highly similar to AF157833.1 noncl	4.2
	408577	H50572	Hs.19515	ESTs, Highly similar to NRG3_HUMAN PRO-N	4.2
	409719	AI769160	Hs.108681	Homo sapiens brain tumor associated prot	4.2
	428536	AI143139	Hs.2288	visinin-like 1	4.2
	429118	H20669	Hs.35406	ESTs, Highly similar to unnamed protein	4.2
15	432665	AI753709	Hs.152484	ESTs, Weakly similar to I38022 hypothe	4.2
	447138	AI439112	Hs.93828	ESTs, Weakly similar to 2109260A B cell	4.2
	450648	AI703366	Hs.26768	ESTs	4.2
	451459	AI797515	Hs.270560	ESTs, Moderately similar to ALU7_HUMAN A	4.2
	421686	AB011156	Hs.106794	KIAA0584 protein	4.2
20	452776	AA194540	Hs.13522	ESTs, Weakly similar to I38022 hypothe	4.2
	436421	AI678031	Hs.122813	ESTs, Weakly similar to ZN22_HUMAN ZINC	4.2
	423858	AL137326	Hs.133483	Homo sapiens mRNA; cDNA DKFZp43480650 (f	4.2
	434001	AW950905	Hs.3697	serine (or cysteine) proteinase inhibito	4.2
	437380	AL359577	Hs.112198	Homo sapiens mRNA; cDNA DKFZp5474073 (fr	4.2
25	432328	AI572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	4.1
	439607	BE540565	Hs.159460	ESTs	4.1
	424028	AF055084	Hs.153692	Homo sapiens cDNA FLJ14354 fts, clone Y7	4.1
	446936	H10207	Hs.47314	ESTs	4.1
	424240	AB023185	Hs.143535	calcium/calmodulin-dependent protein kin	4.1
30	412446	AI768015	Hs.92127	ESTs	4.1
	409953	AA332277	Hs.57691	cadherin 18, type 2	4.1
	416220	N49776	Hs.170994	hypothetical protein MGC10946	4.1
	419683	AA248897	Hs.48784	ESTs	4.1
	426071	AW138057	Hs.163835	ESTs	4.1
35	428743	AL080060	Hs.301549	Homo sapiens mRNA; cDNA DKFZp564H172 (fr	4.1
	432809	AA565509	Hs.131703	ESTs	4.1
	440105	AA694010	Hs.6932	Homo sapiens clone 23809 mRNA sequence	4.1
	452039	AI922988	Hs.172510	ESTs	4.1
	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger	4.1
40	457561	AA331517	Hs.286055	chimerin (chimaerin) 2	4.1
	429038	AL023513	Hs.194766	seizure related gene 6 (mouse)-like	4.1
	439932	AW954599	Hs.169330	neuronal protein	4.1
	436637	AI783629	Hs.26766	ESTs	4.1
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	4.1
45	450530	NM_006668	Hs.25121	cytochrome P450, subfamily 46 (cholester	4.1
	407721	Y12735	Hs.38018	dual-specificity tyrosine-(Y)-phosphoryl	4.1
	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfot	4.1
	410486	AW235094	Hs.69233	zinc finger protein	4.0
	413916	N49813	Hs.75615	apolipoprotein C-II	4.0
50	438703	AI803373	Hs.31599	ESTs	4.0
	424726	AK001007	Hs.138760	Homo sapiens cDNA FLJ10145 fts, clone HE	4.0
	405771				4.0
	418841	NM_002332	Hs.89137	low density lipoprotein-related protein	4.0
	421764	AI681535	Hs.148135	serine/threonine kinase 33	4.0
55	424176	AL137273	Hs.142307	hypothetical protein	4.0
	425773	N21279	Hs.237749	ESTs	4.0
	427304	AA761526	Hs.163853	ESTs	4.0
	428882	AA436915	Hs.131748	ESTs, Moderately similar to ALU7_HUMAN A	4.0
	452834	AI636627	Hs.105685	KIAA1688 protein	4.0
60	453745	AA952989	Hs.63908	hypothetical protein MGC14726	4.0
	405239	U89281	Hs.11958	oxidative 3 alpha hydroxysteroid dehydro	4.0
	413801	M62246	Hs.35406	ESTs, Highly similar to unnamed protein	4.0
	429698	AI685086	Hs.26339	ESTs, Weakly similar to S21348 probable	4.0
	435854	AJ278120	Hs.4996	putative ankyrin-repeat containing prote	4.0
65	439199	R40373	Hs.26299	ESTs	4.0
	439450	RS1613	Hs.125304	ESTs	4.0
	446782	AI653048	Hs.144006	ESTs	4.0
	419687	AI638859	Hs.227699	ESTs, Weakly similar to T2D3_HUMAN TRANS	3.9
	402408				3.9
70	453362	H14988	Hs.107375	ESTs	3.9
	414219	W20010	Hs.75823	ALL1-fused gene from chromosome 1q	3.9
	420578	AA813546	Hs.99034	GTP-binding protein Rho7	3.9
	425010	T16837	Hs.4241	ESTs	3.9
	444230	H95537	Hs.146067	ESTs	3.9
75	441736	AW292779	Hs.169799	ESTs	3.9
	418951	F07809	Hs.89506	paired box gene 6 (aniridia, keratitis)	3.9
	406311				3.9
	408460	AA054726	Hs.285574	ESTs	3.9
	410658	AW105231	Hs.192035	ESTs	3.9
80	414699	AI815523	Hs.76930	synuclein, alpha (non A4 component of am	3.9
	418849	AW474547	Hs.53565	Homo sapiens PIG-M mRNA for mannosyltran	3.9
	429477	AI275514	Hs.6658	ESTs	3.9
	433766	AA609234	Hs.112669	ESTs	3.9
	436190	AK001059		gb:Homo sapiens cDNA FLJ10197 fts, clone	3.9

	447891	R41754	Hs.6496	ESTs	3.9
	450221	AA328102	Hs.24541	cytoskeleton associated protein 2	3.9
	404283				3.9
5	453919	AW959912	Hs.7076	KIAA1705 protein	3.9
	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	3.9
	412754	AW160375	Hs.74565	amyloid beta (A4) precursor-like protein	3.9
	445314	A1689948	Hs.65489	Homo sapiens cDNA: FLJ21517 fs, clone C	3.9
	435652	N32388	Hs.334370	uncharacterized hypothalamus protein HBE	3.9
10	407378	AA299264	Hs.57776	ESTs, Moderately similar to I38022 hypot	3.9
	438054	AA776626	Hs.62183	ESTs	3.9
	438420	AA443966	Hs.31595	ESTs	3.9
	445133	AW157648	Hs.153506	ESTs	3.9
	432590	A1609273	Hs.110783	ESTs	3.9
15	453331	A1240665	Hs.8895	ESTs	3.9
	410227	AB009284	Hs.61152	exostoses (multiple)-like 2	3.8
	424635	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fs, clone PL	3.8
	451489	NM_005503	Hs.26468	amyloid beta (A4) precursor protein-bind	3.8
	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13090 fs, clone NT	3.8
20	448302	A1480208	Hs.182906	Homo sapiens mRNA for KIAA1872 protein,	3.8
	415669	NM_005025	Hs.78589	serine (or cysteine) proteinase inhibitor	3.8
	417355	D13168	Hs.82002	endothelin receptor type B	3.8
	446727	AB011095	Hs.16032	KIAA0523 protein	3.8
	424340	AA339036	Hs.7033	ESTs	3.8
25	423346	A1267677	Hs.127416	synaptotagmin 1	3.8
	412788	AA120960	Hs.198416	ESTs	3.8
	404593				3.8
	416856	N27833	Hs.269028	ESTs, Weakly similar to I38022 hypothet	3.8
	429896	AA460367	Hs.224223	ESTs, Moderately similar to I38022 hypot	3.8
30	439619	AW975998	Hs.58595	ESTs, Weakly similar to I38022 hypothet	3.8
	439634	W79377	Hs.167	microtubule-associated protein 2	3.8
	440322	AA879430		gb:oj1d08.s1 Soares_NFL_T_GBC_S1 Homo s	3.8
	447761	AF061573	Hs.19492	protocadherin 8	3.8
	452453	A1902519		gb:QV-BT009-101198-051 BT009 Homo sapien	3.8
35	439671	AW162840	Hs.6841	kinesin family member 5C	3.8
	447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	3.8
	459278	AW294659	Hs.34054	Homo sapiens cDNA: FLJ22468 fs, clone H	3.8
	447028	A1973128	Hs.167257	brain link protein-1	3.8
	449458	A1805078	Hs.208261	ESTs	3.8
40	445888	AF070564	Hs.13415	Homo sapiens clone 24571 mRNA sequence	3.8
	407385	AA610150	Hs.272072	ESTs, Weakly similar to I38022 hypothet	3.8
	428841	A1418430	Hs.104935	ESTs	3.8
	430643	AW970065	Hs.287425	MEGF10 protein	3.8
	422263	AA307639	Hs.129908	KIAA0591 protein	3.8
45	451625	R56793	Hs.106576	alanine-glyoxylate aminotransferase 2-II	3.8
	439236	BE160952	Hs.247117	ESTs, Moderately similar to ALUF_HUMAN I	3.8
	441928	A1370188	Hs.211454	ESTs	3.8
	441797	A1936933	Hs.214635	ESTs	3.7
	414922	D00723	Hs.77631	glycine cleavage system protein H (amino	3.7
50	425588	F07396	Hs.46751	ESTs	3.7
	437007	AA741300	Hs.202599	ESTs, Weakly similar to I38022 hypothet	3.7
	435793	AB037734	Hs.4993	KIAA1313 protein	3.7
	443682	A1383061	Hs.47248	ESTs, Highly similar to similar to Cdc14	3.7
	425741	AF052152	Hs.159412	Homo sapiens clone 24628 mRNA sequence	3.7
55	418211	BE244748	Hs.247474	hypothetical protein FLJ21032	3.7
	440080	AW051597	Hs.143707	ESTs	3.7
	452898	AA814497	Hs.78792	ESTs	3.7
	435575	AF213457	Hs.44234	triggering receptor expressed on myeloid	3.7
	409234	A1879419	Hs.27206	ESTs	3.7
60	420489	AA815089	Hs.193513	ESTs	3.7
	426890	AA393167	Hs.41294	ESTs	3.7
	438849	W28948	Hs.10762	ESTs	3.7
	441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	3.7
	448796	AA147829	Hs.301431	endothelial zinc finger protein induced	3.7
65	459318	NM_000038		gb:Homo sapiens adenomatosis polyposis c	3.7
	459518	A1937419	Hs.294069	Homo sapiens cDNA FLJ13384 fs, clone PL	3.7
	434444	A1765278	Hs.101257	hypothetical protein MGC3295	3.7
	421183	AL135740	Hs.102447	TSC-22-like	3.7
	410555	U92649	Hs.64311	a disintegrin and metalloproteinase doma	3.7
70	421637	AF035290	Hs.106300	Homo sapiens clone 23558 mRNA sequence	3.7
	418522	AA605038	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	3.7
	420807	AA280627	Hs.57846	ESTs	3.7
	449961	AW265634	Hs.133100	ESTs	3.7
	422634	NM_016010	Hs.118821	CGI-62 protein	3.7
75	421030	AW161357	Hs.101174	microtubule-associated protein tau	3.7
	427099	AB032953	Hs.173560	odd Oz/ten-m homolog 2 (Drosophila, mous	3.7
	452355	N54926	Hs.29202	G protein-coupled receptor 34	3.7
	440483	A1200836	Hs.150386	ESTs	3.7
	429597	NM_003816	Hs.2442	a disintegrin and metalloproteinase doma	3.7
80	423756	AA828125		gb:od71a09.s1 NCI_CGAP_Ov2 Homo sapiens	3.6
	425187	AW014488	Hs.22509	ESTs	3.6
	434859	BE255080	Hs.299315	collapsin response mediator protein-5; C	3.6
	413199	M62843	Hs.75236	ELAV (embryonic lethal, abnormal vision,	3.6
	445729	H21066	Hs.13223	Homo sapiens mRNA full length insert cDN	3.6

	416120	H46739	gb:yo14h02.s1 Soares adult brain N265MB5	3.6
	429239	AA448419	Hs.45209 ESTs	3.6
	419086	NM_000216	Hs.89591 Kallmann syndrome 1 sequence	3.6
5	446659	AI335361	Hs.226376 ESTs	3.6
	426757	AW205640	Hs.158206 ESTs	3.6
	418819	AA228776	Hs.191721 ESTs	3.6
	458332	AI000341	Hs.220491 ESTs	3.6
	408826	AF216077	Hs.48376 Homo sapiens clone HB-2 mRNA sequence	3.6
10	410343	AA084273	Hs.76561 ESTs, Weakly similar to S47072 finger pr	3.6
	410507	AA355288	Hs.40834 transitional epithelia response protein	3.6
	422977	AA631498	gb:np83h04.s1 NCJ_CGAP_Thy1 Homo sapiens	3.6
	425305	AA363025	Hs.155572 Human clone 23801 mRNA sequence	3.6
	428002	AA418703	gb:zy98c03.s1 Soares_NhHMPu_S1 Homo sapi	3.6
15	428505	AL035461	Hs.2281 chromogranin B (secretogranin 1)	3.6
	430530	AA480870	Hs.47660 ESTs	3.6
	436425	AI913146	Hs.318725 CG-72 protein	3.6
	438078	AI016377	Hs.131693 ESTs	3.6
	442927	AI024347	Hs.131519 ESTs	3.6
	446242	N56336	Hs.7360 ESTs	3.6
20	448831	AL080123	Hs.22182 zinc finger protein 23 (KOX 16)	3.6
	450474	AW872844	Hs.201919 ESTs	3.6
	452198	AI097560	Hs.61210 ESTs, Weakly similar to I38022 hypotheti	3.6
	455800	R22479	Hs.167073 Homo sapiens cDNA FLJ13047 fs, clone NT	3.6
25	436443	AW138211	Hs.128745 ESTs	3.6
	426514	BE616633	Hs.170195 bone morphogenetic protein 7 (osteogenic	3.6
	456038	AA203285	Hs.294141 ESTs, Weakly similar to alternatively sp	3.6
	408902	AW014869	Hs.5510 ESTs	3.6
	442950	AI500417	Hs.46764 ESTs	3.6
30	423905	AW579960	Hs.135150 lung type-I cell membrane-associated gly	3.6
	425478	AB007953	Hs.268840 ESTs	3.6
	453884	AA355925	Hs.35232 KIAA0186 gene product	3.6
	404721			3.6
	408453	AI369838	Hs.45127 chondroitin sulfate proteoglycan 5 (neur	3.6
35	440553	AA889416	Hs.295362 Homo sapiens cDNA FLJ14459 fs, clone HE	3.5
	446372	AB020644	Hs.14945 long fatty acyl-CoA synthetase 2 gene	3.5
	413999	N46124	Hs.34460 ESTs	3.5
	421458	NM_003854	Hs.104576 carbohydrate (keratan sulfate Gal-6) sul	3.5
	425017	AL119305	Hs.288405 ESTs	3.5
40	435958	H98180	Hs.117975 ESTs	3.5
	415101	R45531	Hs.144534 ESTs	3.5
	451320	AW118072	Hs.89981 diacylglycerol kinase, zeta (104kD)	3.5
	430290	AI734110	Hs.135355 ESTs	3.5
	416836	D54745	Hs.80247 cholecystokinin	3.5
45	414821	M63835	Hs.77424 Fc fragment of IgG, high affinity Ia, re	3.5
	419412	AW161058	Hs.90297 synuclein, beta	3.5
	437860	AA333063	Hs.279898 Homo sapiens cDNA: FLJ23165 fs, clone L	3.5
	452689	F33868	Hs.284176 transferrin	3.5
	416661	AA634543	Hs.79440 IGF-II mRNA-binding protein 3	3.5
50	427491	R43279	Hs.22574 ESTs, Weakly similar to I38022 hypotheti	3.5
	428037	N47474	Hs.89230 potassium intermediate/small conductance	3.5
	444584	AJ168422	gb:ok30e11.x1 Soares_NSF_FB_9W_OT_PA_P_S	3.5
	408296	AI117452	Hs.44155 DKFZP586G1517 protein	3.5
	453775	NM_002916	Hs.35120 replication factor C (activator 1) 4 (37	3.5
55	412659	AW753865	Hs.74376 olfactomedin related ER localized protel	3.5
	429077	AB028983	Hs.2352 adenylate cyclase 2 (brain)	3.5
	436887	AW953157	Hs.193235 hypothetical protein DKFZp547D155	3.5
	450784	AW246803	Hs.47289 ESTs	3.5
	446827	AW451243	Hs.157069 ESTs	3.5
60	436434	N50465	Hs.92927 putative 47 kDa protein	3.5
	412777	AI335773	Hs.270123 ESTs	3.5
	438476	AA326108	Hs.33829 bHLH protein DEC2	3.5
	408601	U47928	Hs.86122 protein A	3.4
	429401	AW296102	Hs.99272 ESTs, Weakly similar to S32567 A4 protei	3.4
65	448425	AI500359	Hs.233401 ESTs	3.4
	418727	AA227609	Hs.94834 ESTs	3.4
	451729	AW160725	Hs.312469 ESTs	3.4
	435910	AI084152	Hs.21782 ESTs, Weakly similar to ALU7_HUMAN ALU S	3.4
	434577	R37316	Hs.179769 Homo sapiens cDNA: FLJ22487 fs, clone H	3.4
70	414598	AI094221	Hs.135150 lung type-I cell membrane-associated gly	3.4
	439627	BE621702	Hs.29076 hypothetical protein FLJ21841	3.4
	413293	AL047483	Hs.302498 GTP-binding protein homologous to Saccha	3.4
	423992	AW898292	Hs.137206 Homo sapiens mRNA; cDNA DKFZp564H1663 (I	3.4
	426249	F05422	Hs.168352 nucleoporin-like protein 1	3.4
75	426968	U07616	Hs.173034 amphiphysin (Stiff-Mann syndrome with br	3.4
	430388	AA356923	Hs.240770 nuclear cap binding protein subunit 2, 2	3.4
	435081	AI651474	Hs.163944 ESTs	3.4
	452291	AF015592	Hs.28853 CDC7 (cell division cycle 7, S. cerevisi	3.4
	449714	AB033015	Hs.23941 KIAA1189 protein	3.4
80	443392	AI055821	Hs.293420 ESTs	3.4
	410082	AA081594	Hs.158311 Musashi (Drosophila) homolog 1	3.4
	445337	NM_013280	Hs.12523 fibronectin leucine rich transmembrane p	3.4
	408493	BE206854	Hs.46039 phosphoglycerate mutase 2 (muscle)	3.4
	432731	R31178	Hs.287820 fibronectin 1	3.4

5	448758	AB018311	Hs.21917	KIAA0768 protein	3.4
	432613	AW081698	Hs.80712	KIAA0202 protein	3.4
	434164	AW207019	Hs.148135	serine/threonine kinase 33	3.4
	425294	AF033827	Hs.155553	HNK-1 sulfotransferase	3.4
	410108	AA081659	Hs.318775	OSBP-related protein 6	3.4
	406815	AA833930	Hs.288036	tRNA isopentenylpyrophosphate transferase	3.4
	402855				3.4
	422170	AI791949	Hs.112432	anti-Müllerian hormone	3.3
10	445034	AW293376	Hs.143659	ESTs	3.3
	424378	W28020	Hs.167988	neural cell adhesion molecule 1	3.3
	423611	AB011163	Hs.129908	KIAA0591 protein	3.3
	435593	R88872	Hs.4964	DKFZP586J1624 protein	3.3
	404819				3.3
15	436607	AW681783	Hs.211061	ESTs	3.3
	427315	AA179949	Hs.175563	Homo sapiens mRNA; cDNA DKFZp564N0763 (I	3.3
	452693	T79153	Hs.48589	zinc finger protein 228	3.3
	454996	AW850180		gb:IL3-CT0219-271099-022-C09 CT0219 Homo	3.3
	406927	M26460		gb:Homo sapiens (clone 104) retinoblasto	3.3
20	409045	AA635062	Hs.50094	Homo sapiens mRNA; cDNA DKFZp434O0515 (I	3.3
	415238	R37780	Hs.21422	ESTs	3.3
	417845	AL117461	Hs.82719	Homo sapiens mRNA; cDNA DKFZp586F1822 (I	3.3
	421192	AA833718	Hs.204529	KIAA1806 protein	3.3
	426695	AW118191	Hs.112729	ESTs	3.3
25	438885	AI886558	Hs.184987	ESTs	3.3
	451762	AF222980	Hs.26985	disrupted in schizophrenia 1	3.3
	452103	R42764	Hs.339654	ESTs, Weakly similar to I38022 hypothesis	3.3
	453590	AF150278	Hs.33578	KIAA0820 protein	3.3
	453616	NM_003462	Hs.33846	dynein, axonemal, light intermediate pol	3.3
30	457285	AI038858	Hs.130522	Kv channel-interacting protein 1	3.3
	436045	AB037723	Hs.5028	DKFZP564O0423 protein	3.3
	437470	AL390147	Hs.134742	hypothetical protein DKFZp547D065	3.3
	448520	AB002367	Hs.21355	doublecortin and CaM kinase-like 1	3.3
	436480	AJ271643	Hs.87469	putative acid-sensing ion channel	3.3
35	432656	NM_000246	Hs.3076	MHC class II transactivator	3.3
	443898	AW804296	Hs.9950	Sec61 gamma	3.3
	423582	BE000831	Hs.23837	Homo sapiens cDNA FLJ11812 fs, clone HE	3.3
	445953	AI612775	Hs.145710	ESTs	3.3
	427940	AA417812	Hs.38775	ESTs	3.3
40	414683	S78296	Hs.76888	hypothetical protein MGC12702	3.3
	428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino	3.3
	420649	AI866964	Hs.124704	ESTs, Moderately similar to S85657 alpha	3.3
	419498	AL036591	Hs.20887	hypothetical protein FLJ10392	3.3
	457579	AB030816	Hs.36761	HRAS-like suppressor	3.3
45	436558	AI364997	Hs.7572	ESTs	3.2
	424369	R87622	Hs.26714	KIAA1831 protein	3.2
	457065	AJ476318	Hs.192480	ESTs	3.2
	440210	AW674562	Hs.125296	ESTs	3.2
50	444513	AL120214	Hs.7117	glutamate receptor, ionotropic, AMPA 1	3.2
	434353	AA630863	Hs.131375	ESTs, Moderately similar to ALU8_HUMAN I	3.2
	414430	AJ346201	Hs.76118	ubiquitin carboxyl-terminal esterase L1	3.2
	439924	AI985897	Hs.125293	ESTs	3.2
	411505	AF155659	Hs.70565	molybdenum cofactor synthesis 2	3.2
	423175	W27595	Hs.18653	hypothetical protein FLJ14627	3.2
55	415115	AA214228	Hs.127751	hypothetical protein	3.2
	407878	D87468	Hs.40888	activity-regulated cytoskeleton-associated	3.2
	410274	AA381807	Hs.61762	hypoxia-inducible protein 2	3.2
	437762	T78028	Hs.154679	synaptotagmin I	3.2
	438944	AA302517	Hs.92732	KIAA1444 protein	3.2
60	450313	AI038989	Hs.332633	Bardet-Biedl syndrome 2	3.2
	409459	D86407	Hs.54481	low density lipoprotein receptor-related	3.2
	410953	AW811766	Hs.334858	hypothetical protein MGC12250	3.2
	418527	AA450386	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	3.2
	420081	AW510776	Hs.94958	tubulin tyrosine ligase-like 1	3.2
65	429496	AA453800	Hs.192793	ESTs	3.2
	430099	AW194988	Hs.20537	hypothetical protein FLJ13942	3.2
	434928	AW015595	Hs.4267	Homo sapiens clones 24714 and 24715 mRNA	3.2
	435532	AW291488	Hs.117305	Homo sapiens, clone IMAGE:3682908, mRNA	3.2
	438306	AW188266	Hs.163645	ESTs	3.2
70	439274	AF086092	Hs.48372	ESTs	3.2
	440847	AA907511	Hs.130178	ESTs	3.2
	447750	AI422234	Hs.143434	contactin 1	3.2
	455350	AW901809		gb:QVO-NN1020-170400-195-h02 NN1020 Homo	3.2
	430890	X54232	Hs.2699	glypican 1	3.2
75	420568	F09247	Hs.247735	protocadherin alpha 10	3.2
	410768	AF038185	Hs.66187	Homo sapiens clone 23700 mRNA sequence	3.2
	427450	AB014526	Hs.178121	KIAA0626 gene product	3.2
	430456	AA314998	Hs.241503	hypothetical protein	3.2
	430181	AF065314	Hs.234785	cyclic nucleotide gated channel alpha 3	3.2
80	418512	AW498974	Hs.89981	diacylglycerol kinase, zeta (104kD)	3.2
	419912	AF249745	Hs.6066	Rho guanine nucleotide exchange factor (	3.2
	450689	AI369275	Hs.243010	Homo sapiens cDNA FLJ14445 fs, clone HE	3.2
	424899	AL119387	Hs.119062	ESTs	3.2
	436277	R88520	Hs.120917	ESTs	3.2

5	451455	AJ337227	Hs.8821	hepcidin antimicrobial peptide	3.2
	445078	AJ869975	Hs.4775	junctional 3	3.2
	447746	AW015920	Hs.161359	ESTs	3.2
	435458	F11872	Hs.4892	Homo sapiens clone 24841 mRNA sequence	3.2
	427729	AB033100	Hs.300646	KIAA protein (similar to mouse paladin)	3.2
	417417	F05745	Hs.89512	ATPase, Ca <sup>++</sup> transporting, plasma membra	3.1
	438810	AW897846	Hs.6421	hypothetical protein DKFZp761N09121	3.1
	439570	T79925	Hs.269165	ESTs, Weakly similar to ALU1_HUMAN ALU 5	3.1
10	432527	AW975028	Hs.102754	ESTs	3.1
	416801	X98834	Hs.79971	sal (Drosophila)-like 2	3.1
	421988	AW450481	Hs.161333	ESTs	3.1
	426509	M31166	Hs.2050	pentatin-related gene, rapidly induced b	3.1
	408786	AA773187	Hs.294027	ESTs	3.1
15	433494	AB029396	Hs.3353	beta-1,3-glucuronyltransferase 1 (glucur	3.1
	412723	AA648459	Hs.335951	hypothetical protein AF301222	3.1
	418329	AW247430	Hs.84152	cystathionine-beta-synthase	3.1
	439456	AJ752409	Hs.109314	hypothetical protein FLJ20980	3.1
	428832	AA578229	Hs.324239	ESTs, Moderately similar to ZN91_HUMAN Z	3.1
20	452780	BE171598	Hs.13522	ESTs, Weakly similar to I38022 hypotheti	3.1
	438192	AJ859065	Hs.337620	Homo sapiens AFG3L1 isoform 1 mRNA, part	3.1
	424939	AK000059	Hs.153881	Homo sapiens NY-REN-62 antigen mRNA, par	3.1
	403053	RS8624	Hs.2186	eukaryotic translation elongation factor	3.1
	404298				3.1
25	407864	AF069291	Hs.40539	chromosome 8 open reading frame 1	3.1
	410181	AJ468210	Hs.261285	pleiotropic regulator 1 (PRL1, Arabidops	3.1
	418852	BE537037	Hs.273294	hypothetical protein FLJ20069	3.1
	449101	AA205847	Hs.23016	G protein-coupled receptor	3.1
	453240	AJ969564	Hs.166254	hypothetical protein DKFZp5661133	3.1
30	440486	BE243513	Hs.7212	hypothetical protein PP1044	3.1
	408096	BE250162	Hs.83765	dihydrofolate reductase	3.1
	439864	AJ720078	Hs.291997	ESTs, Weakly similar to A47582 B-cell gr	3.1
	414706	AW340125	Hs.76989	KIAA0097 gene product	3.1
	436315	BE390513	Hs.27935	hypothetical protein MGC4837	3.1
35	426855	AL117427	Hs.172778	Homo sapiens mRNA; cDNA DKFZp566P013 (tr	3.1
	425683	AB037813	Hs.159200	hypothetical protein DKFZp762K222	3.1
	410126	BE169274	Hs.169387	KIAA0036 gene product	3.1
	435312	AJ243396	Hs.4865	voltage-gated sodium channel beta-3 subu	3.1
	425491	AA883316	Hs.255221	ESTs	3.1
40	456273	AF154846	Hs.1148	zinc finger protein	3.1
	412140	AA219691	Hs.73625	RAB8 interacting, kinesin-like (rabkines	3.1
	445255	NM_014841	Hs.12477	synaptosomal-associated protein, 91 kDa	3.1
	432154	AJ701523	Hs.112577	ESTs	3.1
	453128	AW026516	Hs.31791	acylphosphatase 2, muscle type	3.1
45	438458	AW975186		gb:EST387294 MAGE sequences, MAGN Homo	3.1
	448616	AF035621	Hs.21611	kinesin family member 3C	3.0
	429281	AA830856	Hs.29808	Homo sapiens cDNA: FLJ21122 fs, clone C	3.0
	443906	AA348031	Hs.7913	ESTs	3.0
	417318	AW953937	Hs.12891	ESTs	3.0
50	452619	AW298597	Hs.61884	Homo sapiens, clone IMAGE:4298026, mRNA,	3.0
	444153	AK001610	Hs.10414	hypothetical protein FLJ10748	3.0
	408790	AW580227	Hs.47860	neurotrophic tyrosine kinase, receptor,	3.0
	426327	W03242	Hs.44898	Homo sapiens clone TCCCTA00151 mRNA sequ	3.0
	451488	AW503398	Hs.293663	ESTs, Moderately similar to I38022 hypot	3.0
55	422758	AF152329	Hs.284180	protocadherin gamma subfamily C, 3	3.0
	421633	AF121860	Hs.106260	sorting nexin 10	3.0
	428361	NM_015905	Hs.183858	transcriptional intermediary factor 1	3.0
	418932	L34059	Hs.89484	cadherin 4, type 1, R-cadherin (retinal)	3.0
	416805	F13271	Hs.79981	Human clone 23560 mRNA sequence	3.0
60	419518	U9289	Hs.90798	Human clone 23695 mRNA sequence	3.0
	422709	AA315331	Hs.153485	ESTs	3.0
	423135	N57655	Hs.26411	ESTs	3.0
	424901	Z11933	Hs.182505	POU domain, class 3, transcription facto	3.0
	426617	W58006	Hs.266258	endonuclease G-like 1	3.0
65	427386	AW836261	Hs.337717	ESTs	3.0
	429859	NM_007050	Hs.225952	protein tyrosine phosphatase, receptor t	3.0
	435071	D60683	Hs.35495	ESTs	3.0
	435092	AL137310	Hs.4749	Homo sapiens mRNA; cDNA DKFZp761E13121 (	3.0
	436211	AK001581	Hs.334828	hypothetical protein FLJ10719; KIAA1794	3.0
70	436936	AL134451	Hs.197478	ESTs	3.0
	445855	BE247129	Hs.145569	ESTs	3.0
	452294	AJ871925	Hs.117895	ESTs, Moderately similar to A47582 B-cel	3.0
	433980	AA137152	Hs.286049	phosphoserine aminotransferase	3.0
	430228	AW950939	Hs.6382	ESTs, Highly similar to T00391 hypotheti	3.0
75	451026	AA013218	Hs.157492	cer-d4 (mouse) homolog	3.0
	435232	NM_001262	Hs.4854	cyclin-dependent kinase inhibitor 2C (p1	3.0
	439566	AF086387		gb:Homo sapiens full length insert cDNA	3.0
	425782	U66468	Hs.159525	cell growth regulatory with EF-hand doma	3.0
	416586	D44643	Hs.14144	secreted modular calcium-binding protein	3.0
80	416874	H98752	Hs.42568	ESTs	3.0
	410386	W26187	Hs.3327	Homo sapiens cDNA: FLJ22219 fs, clone H	3.0
	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	3.0
	424066	Z99348	Hs.112461	ESTs, Weakly similar to I38022 hypotheti	3.0
	404048				3.0

	429163	AA884766		gb:am20a10.s1 Soares_NFL_T_GBC_S1 Homo	3.0
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	3.0
	418196	AI745649	Hs.26549	KIAA1708 protein	3.0
5	434131	AI858275	Hs.143659	ESTs	3.0
	441255	R06350	Hs.171635	ESTs	2.9
	453900	AW003582	Hs.226414	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.9
	453905	NM_002314	Hs.36566	UM domain kinase 1	2.9
	416602	NM_006159	Hs.79389	nel (chicken)-like 2,	2.9
10	431173	AW971198	Hs.294068	ESTs	2.9
	425599	AW366745	Hs.214140	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.9
	436401	AI087958	Hs.29088	ESTs	2.9
	422960	AW890487	Hs.63984	cadherin 13, H-cadherin (heart)	2.9
	451558	NM_001089	Hs.26630	ATP-binding cassette, sub-family A (ABC1	2.9
15	412490	AW803564	Hs.268850	Homo sapiens cDNA: FLJ22528 fs, clone H	2.9
	433149	BE257672	Hs.42949	hypothetical protein HES6	2.9
	434811	AW971205	Hs.114280	ESTs	2.9
	425897	AA935315	Hs.48965	Homo sapiens cDNA: FLJ21693 fs, clone C	2.9
	452092	BE245374	Hs.27842	hypothetical protein FLJ11210	2.9
20	453496	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	2.9
	411124	AW196937	Hs.53929	ESTs, Weakly similar to ALU8_HUMAN !!!	2.9
	419227	BE537383	Hs.89739	cholinergic receptor, nicotinic, beta po	2.9
	427651	AW405731	Hs.18498	Homo sapiens cDNA FLJ12277 fs, clone MA	2.9
	441707	R42637	Hs.21963	hypothetical protein DKFZp76180514	2.9
25	435741	AI240668	Hs.113099	ESTs	2.9
	437273	AL137451	Hs.120873	ESTs, Highly similar to T46266 hypotheti	2.9
	422939	AW394055	Hs.98427	ESTs, Weakly similar to I38022 hypotheti	2.9
	439376	AA883521	Hs.222064	ESTs	2.9
	439935	S75105	Hs.301676	glutamate receptor, ionotropic, kainate	2.9
30	437267	AW511443	Hs.258110	ESTs	2.9
	453740	AL120295	Hs.311809	ESTs, Moderately similar to PC4259 ferri	2.9
	400250				2.9
	400992				2.9
	408814	N62499	Hs.176227	hypothetical protein FLJ11155	2.9
35	411849	AW964970	Hs.18861	ESTs, Moderately similar to KIAA1276 pro	2.9
	414853	U31116	Hs.77501	sarcoglycan, beta (43kD dystrophin-assoc	2.9
	423751	AW235633	Hs.46525	ESTs	2.9
	426910	AA470023	Hs.190089	ESTs, Moderately similar to ALU1_HUMAN A	2.9
	450203	AF097994	Hs.301528	L-tryptophan/alpha-aminoadipate aminotra	2.9
40	459311	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	2.9
	425304	AA463844	Hs.31339	fibroblast growth factor 11	2.9
	428500	AI815395	Hs.184641	fatty acid desaturase 2	2.9
	421641	AI638184	Hs.106334	Homo sapiens clone 23836 mRNA sequence	2.9
	421141	AW117261	Hs.125914	ESTs	2.9
45	407870	AB032990	Hs.40719	hypothetical protein KIAA1164	2.9
	456723	Z43902	Hs.4748	adenylate cyclase activating polypeptide	2.9
	436456	AW292677	Hs.248122	G protein-coupled receptor 24	2.9
	421483	NM_003368	Hs.104717	hypothetical protein MGC11333	2.9
	412180	R16180	Hs.274461	ESTs	2.9
50	446131	NM_000929	Hs.290	phospholipase A2, group V	2.9
	441668	AI611973	Hs.127525	ESTs	2.9
	437387	AI198874	Hs.28847	AD026 protein	2.9
	423420	AI571364	Hs.128382	Homo sapiens mRNA: cDNA DKFZp76111224 (f	2.9
	427958	AA418000	Hs.98280	potassium intermediate/small conductance	2.9
55	429084	AJ001443	Hs.195614	splicing factor 3b, subunit 3, 130kD	2.9
	447067	R42098	Hs.21964	ESTs	2.9
	430887	N66801	Hs.260287	KIAA1841 protein	2.9
	441824	AB007871	Hs.7977	KIAA0411 gene product	2.9
	424126	AA335635	Hs.96917	ESTs	2.9
60	408739	W01556	Hs.238797	ESTs, Moderately similar to I38022 hypot	2.9
	447422	BE618703	Hs.98258	orthopedia (Drosophila) homolog	2.9
	435615	Y15065	Hs.4975	potassium voltage-gated channel, KQT-like	2.9
	446997	AA383439	Hs.16758	Spir-1 protein	2.9
	433573	AF234887	Hs.57652	cadherin, EGF LAG seven-pass G-type rece	2.9
65	408447	AK002089	Hs.45080	Homo sapiens cDNA FLJ11227 fs, clone PL	2.9
	419588	AI088485	Hs.144759	ESTs, Weakly similar to I38022 hypotheti	2.8
	417022	NM_014737	Hs.80905	Ras association (RalGDS/AF-6) domain fam	2.8
	408432	AW195262		gb:am67b05.x1 NC1_CGAP_CNL1 Homo sapiens	2.8
	420320	AB002361	Hs.96633	KIAA0363 protein	2.8
70	425241	AA324524	Hs.155247	aldolase C, fructose-bisphosphate	2.8
	428670	AA431682	Hs.134832	ESTs	2.8
	424415	NM_001975	Hs.146580	enolase 2, (gamma, neuronal)	2.8
	409185	AW961801	Hs.252406	hypothetical protein FLJ12296 similar to	2.8
	411555	AF113537	Hs.70669	HMP19 protein	2.8
75	426847	S78723	Hs.298623	5-hydroxytryptamine (serotonin) receptor	2.8
	458809	AW972512	Hs.20985	sin3-associated polypeptide, 30kD	2.8
	420071	AB028985	Hs.94806	ATP-binding cassette, sub-family A (ABC1	2.8
	424572	M19650	Hs.150741	2',3'-cyclic nucleotide 3' phosphodiester	2.8
	444670	H58373	Hs.332938	hypothetical protein MGC5370	2.8
80	411089	AA458454	Hs.183418	cell division cycle 2-like 1 (PITSLRE pr	2.8
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	2.8
	440637	AW900115	Hs.7309	Homo sapiens clone 23741 mRNA sequence	2.8
	408554	AA836381	Hs.315111	nuclear receptor co-repressor/HDAC3 comp	2.8
	403056	R58624	Hs.2186	eukaryotic translation elongation factor	2.8

	423449	AJ497900	Hs.33067	ESTs	2.8
	424188	AW954552	Hs.142634	zinc finger protein	2.8
	429006	AA443143	Hs.50929	hypothetical protein FLJ13842	2.8
5	434981	AW182577	Hs.293077	ESTs	2.8
	437435	AA249439	Hs.27027	hypothetical protein DKFZp762H1311	2.8
	442748	AI016713	Hs.135787	ESTs	2.8
	443312	NS2025	Hs.46616	ESTs	2.8
	450940	AJ744943	Hs.143209	ESTs, Weakly similar to I38022 hypothet	2.8
10	452738	AL133800	Hs.7088	hypothetical protein MGC12435	2.8
	409182	AA064970	Hs.118145	ESTs	2.8
	439793	AA018825	Hs.7934	Kruppel-like factor 4 (gvl)	2.8
	432683	AW995441	Hs.10475	ESTs	2.8
	434269	AK001991	Hs.3781	similar to murine leucine-rich repeat pr	2.8
15	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotoxic)	2.8
	433290	R20077	Hs.302185	Homo sapiens clone Z3618 mRNA sequence	2.8
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	2.8
	435977	AL138079	Hs.5012	brain-specific membrane-anchored protein	2.8
	430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	2.8
20	425168	R96366		gb:yq37d04.s1 Soares fetal liver spleen	2.8
	428180	AI129767	Hs.182874	guanine nucleotide binding protein (G pr	2.8
	409348	AI401535	Hs.146090	ESTs	2.8
	409887	AI137634	Hs.56876	Homo sapiens mRNA; cDNA DKFZp434H1419 (I	2.8
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	2.8
25	430039	BE253012	Hs.153400	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.8
	417642	BE302665	Hs.105461	hypothetical protein FLJ20357	2.8
	419169	AW851980	Hs.262346	ESTs, Weakly similar to S72482 hypothet	2.8
	434008	AA740878	Hs.112982	ESTs	2.8
	446776	AW293417	Hs.156455	ESTs	2.8
30	408838	AI669535	Hs.40369	ESTs	2.8
	422565	BE259035	Hs.118400	singed (Drosophila)-like (sea urchin fas	2.8
	447397	BE247676	Hs.18442	E-1 enzyme	2.8
	412530	AA766268	Hs.266273	hypothetical protein FLJ13346	2.8
	424330	AW073953	Hs.333396	Homo sapiens cDNA FLJ13596 fls, clone PL	2.8
35	446377	AW014022	Hs.170953	ESTs	2.8
	458924	BE242158	Hs.24427	DKFZP566O1846 protein	2.8
	447710	AI420523	Hs.328241	ESTs	2.8
	404049				2.8
	416913	AW934714		gb:RC1-D70001-031299-011-s11 D70001 Homo	2.8
40	426400	M78361	Hs.169743	Homo sapiens clone 25121 neuronal olfact	2.8
	413264	W26456	Hs.134757	hypothetical protein FLJ20033	2.8
	458997	AW937420	Hs.59662	ESTs	2.7
	422864	AA318323		gb:EST20390 Retina II Homo sapiens cDNA	2.7
	430526	AF181862	Hs.242407	G protein-coupled receptor, family C, gr	2.7
45	452023	AB032999	Hs.27566	KIAA1173 protein	2.7
	432022	AL162042	Hs.272348	Homo sapiens mRNA; cDNA DKFZp761L1212 (I	2.7
	452438	BE514230	Hs.29595	JM4 protein	2.7
	435408	H07897	Hs.4302	ESTs, Weakly similar to T29299 hypotheti	2.7
	418791	AA935633	Hs.194628	ESTs	2.7
50	438821	AA826425	Hs.291829	ESTs	2.7
	423464	NM_016240	Hs.128856	CSR1 protein	2.7
	442091	AW770493	Hs.182874	guanine nucleotide binding protein (G pr	2.7
	442242	AV647908	Hs.90424	Homo sapiens cDNA: FLJ23285 fls, clone H	2.7
	412436	AA665089		gb:nu76d01.s1 NCL_CGAP_AJv1 Homo sapiens	2.7
55	432821	BE170702	Hs.279005	solute carrier family 21 (organic anion	2.7
	416404	AA180138	Hs.107924	ESTs	2.7
	441364	AW450466	Hs.126830	ESTs, Weakly similar to YD38_YEAST HYPOT	2.7
	450202	AW969756	Hs.34145	ESTs, Weakly similar to B49647 GTP-bind	2.7
	426304	AA374532	Hs.124873	Homo sapiens cDNA FLJ11477 fls, clone HE	2.7
60	428722	U76456	Hs.190787	tissue inhibitor of metalloproteinase 4	2.7
	449701	AW952323	Hs.129908	KIAA0591 protein	2.7
	420372	AW960049	Hs.293660	Homo sapiens, clone IMAGE:3535476, mRNA,	2.7
	410318	AA084050	Hs.269259	ESTs, Weakly similar to S23650 retroviru	2.7
	414603	R58394	Hs.25119	ESTs, Weakly similar to YEX0_YEAST HYPOT	2.7
65	416096	H18577	Hs.88974	cytochrome b-245, beta polypeptide (chro	2.7
	420896	AW149342	Hs.24444	Homo sapiens cDNA: FLJ22165 fls, clone H	2.7
	424856	AA347746	Hs.9521	ESTs, Weakly similar to ZN43_HUMAN ZINC	2.7
	436304	AA339622	Hs.108887	ESTs	2.7
	441027	AJ911412	Hs.126444	ESTs	2.7
70	452545	N31940	Hs.14434	ESTs, Weakly similar to I38022 hypotheti	2.7
	454201	AB023191	Hs.44131	KIAA0974 protein	2.7
	448560	BE613183	Hs.23213	ESTs	2.7
	426807	AA385315	Hs.156682	ESTs	2.7
	425825	AJ929508	Hs.159590	lymphocyte antigen 6 complex, locus H	2.7
75	440351	AF030933	Hs.7179	RAD1 (S. pombe) homolog	2.7
	425390	AI092634	Hs.156114	protein tyrosine phosphatase, non-recept	2.7
	427624	AA406245	Hs.24895	ESTs	2.7
	426413	AA377823		gb:EST90805 Synovial sarcoma Homo saplen	2.7
80	422491	AA338548	Hs.117546	neurostatin	2.7
	424560	AA158727	Hs.150555	protein predicted by clone 23733	2.7
	432415	T18971	Hs.289014	ESTs, Weakly similar to A43932 mucin 2 p	2.7
	414865	AA157155	Hs.274414	hypothetical protein FLJ14457	2.7
	415827	H17462	Hs.23079	ESTs	2.7
	445568	H00918	Hs.268744	KIAA1796 protein	2.7

	433315	R96754	Hs.239706	GRB2-associated binding protein 1	2.7
	428862	NM_000346	Hs.2316	SRY (sex determining region Y)-box 9 (ca	2.7
	447959	AI452784	Hs.270270	ESTs, Weakly similar to 2109260A B cell	2.7
	426420	BE383808	Hs.322430	NDRG family, member 4	2.7
5	436899	AA764852	Hs.291567	ESTs	2.7
	444100	AA383343	Hs.22116	CDC14 (cell division cycle 14, S. cerevi	2.7
	426501	AW043782	Hs.293616	ESTs	2.7
	449092	U91641	Hs.22985	alpha2,8-sialyltransferase	2.7
10	427311	AB020672	Hs.175411	KIAA0865 protein	2.7
	453313	BE005771	Hs.153746	hypothetical protein FLJ22490	2.7
	404029				2.7
	416289	W26333	Hs.337438	ESTs	2.7
	439108	AW163034	Hs.6467	synaptogyrin 3	2.6
15	418746	AI955289	Hs.300759	ribosomal protein L38	2.6
	412046	Y07847	Hs.73088	RAS-related on chromosome 22	2.6
	435040	AI932350	Hs.152825	ESTs	2.6
	453083	U87223	Hs.31622	contactin associated protein 1	2.6
	428167	AA770021	Hs.16332	ESTs	2.6
20	420028	AB014680	Hs.8786	carbohydrate (N-acetylglucosamine-6-O) s	2.6
	443715	AI583187	Hs.9700	cyclin E1	2.6
	421247	BE391727	Hs.102910	general transcription factor IIH, polype	2.6
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	2.6
	415056	AB004662	Hs.77867	adenosine A1 receptor	2.6
25	451697	AW449774	Hs.296380	POM (POM121 rat homolog) and ZP3 fusion	2.6
	433701	AW445023	Hs.15155	ESTs	2.6
	457358	AI479755	Hs.129010	ESTs	2.6
	430347	NM_002039	Hs.239706	GRB2-associated binding protein 1	2.6
	418027	AB037807	Hs.83293	hypothetical protein	2.6
30	440491	R35252	Hs.24944	ESTs, Weakly similar to 2109260A B cell	2.6
	425171	AW732240	Hs.18365	ESTs	2.6
	459335	AW298545	Hs.250726	EST	2.6
	425402	AI215881	Hs.24970	ESTs, Weakly similar to 834323 GTP-bind	2.6
	453169	AB037815	Hs.32156	KIAA1394 protein	2.6
35	433647	AA603367	Hs.222294	ESTs	2.6
	450414	AI907735	Hs.21446	KIAA1716 protein	2.6
	446233	AI262028	Hs.25205	ESTs	2.6
	415446	F08898	Hs.66075	ESTs	2.6
	445873	AA250970	Hs.251946	poly(A)-binding protein, cytoplasmic 14	2.6
40	413012	D83777	Hs.75137	KIAA0193 gene product	2.6
	428671	BE297851	Hs.189482	zinc finger protein 179	2.6
	427158	AA935603	Hs.166231	ESTs	2.6
	408988	AL119844	Hs.49476	Homo sapiens clone TUA8 Cri-du-chat regi	2.6
	459516	AI049662	Hs.246858	EST	2.6
	402693				2.6
45	408039	AA131424	Hs.50340	ESTs	2.6
	422896	AW961489	Hs.154116	ESTs	2.6
	423130	AW897586	Hs.21213	ESTs	2.6
	438796	W67821	Hs.109590	genethonin 1	2.6
50	439871	R88518	Hs.46736	hypothetical protein FLJ23476	2.6
	440192	AA872282	Hs.190598	ESTs	2.6
	419708	AK000753	Hs.92374	hypothetical protein	2.6
	449436	AA860329	Hs.279307	hypothetical protein DKFZp434i2117	2.6
	436870	AW204219	Hs.155560	cathexin	2.6
55	448424	AW008892	Hs.31924	ESTs	2.6
	401324				2.6
	414136	AA812434	Hs.119023	SMC2 (structural maintenance of chromoso	2.6
	433943	AA992805	Hs.44865	lymphoid enhancer-binding factor 1	2.6
60	428001	H97428	Hs.219907	ESTs, Moderately similar to Transforming	2.6
	429139	F09092	Hs.66087	ESTs	2.6
	423073	BE252922	Hs.123119	MAD (mothers against decapentaplegic, Dr	2.6
	448966	AW372914	Hs.86149	phosphoinositid 3-phosphate-binding prot	2.6
	444001	AI095087	Hs.152299	ESTs, Moderately similar to S65657 alpha	2.6
	412049	N53437	Hs.18268	adenylate kinase 5	2.6
65	441783	BE313412	Hs.7961	Homo sapiens clone 25012 mRNA sequence	2.6
	425287	R88249	Hs.155524	peanut (Drosophila)-like 2	2.6
	432149	AW614326	Hs.157022	ESTs, Weakly similar to T34549 probable	2.6
	452234	AW084176	Hs.223296	ESTs, Weakly similar to I38022 hypotheti	2.6
	453478	AF083898	Hs.33021	neuro-oncological ventral antigen 2	2.6
70	418962	AA714835	Hs.271863	ESTs	2.6
	418858	AW961605	Hs.21145	hypothetical protein RG083M05.2	2.6
	443257	AI334040	Hs.11614	HSPC065 protein	2.6
	428748	AW593206	Hs.98785	Ksp37 protein	2.6
	444984	H15474	Hs.132898	fatty acid desaturase 1	2.6
75	433404	T32982	Hs.102720	ESTs	2.6
	434779	AF153815	Hs.50151	potassium inwardly-rectifying channel, s	2.6
	420582	BE047878	Hs.99093	Homo sapiens chromosome 19, cosmid R2837	2.6
	452856	AF034799	Hs.30881	protein tyrosine phosphatase, receptor I	2.6
	436440	AA71862	Hs.196008	Homo sapiens cDNA FLJ111723 fls, clone HE	2.6
80	438527	AI969251	Hs.115325	RAB7, member RAS oncogene family-like 1	2.6
	433216	AF217412	Hs.47320	neuroigin 3	2.6
	435380	AA679001	Hs.192221	ESTs	2.6
	428966	AF059214	Hs.194687	cholesterol 25-hydroxylase	2.6
	439653	AW021103	Hs.6631	hypothetical protein FLJ20373	2.6



5	419304	AI271326	Hs.146101	ESTs, Weakly similar to T45070 protein k	2.6
	422991	H10940	Hs.48965	Homo sapiens cDNA: FLJ21693 fs, clone C	2.6
	448548	R13209	Hs.21413	solute carrier family 12, (potassium-chl	2.6
	435370	AI964074	Hs.225838	ESTs	2.6
	408875	NM_015434	Hs.48604	DKFZP4348168 protein	2.5
	457005	AJ007421	Hs.172597	sal (Drosophila)-like 3	2.5
	430154	AW583058	Hs.234726	serine (or cysteine) proteinase inhibito	2.5
	438549	BE386801	Hs.21858	trinucleotide repeat containing 3	2.5
10	427951	AI826125	Hs.43546	ESTs	2.5
	411800	N39342	Hs.103042	microtubule-associated protein 1B	2.5
	457683	AI821877	Hs.140002	ESTs, Moderately similar to ALU7_HUMAN A	2.5
	451422	AB002336	Hs.26395	erythrocyte membrane protein band 4.1-5	2.5
	430713	AA351647	Hs.2642	eukaryotic translation elongation factor	2.5
	428826	AL048842	Hs.194019	atractin	2.5
15	428963	AW382682	Hs.258208	Homo sapiens, clone MGC:15606, mRNA, com	2.5
	428141	D50402	Hs.182611	solute carrier family 11 (proton-coupled	2.5
	429550	AW293055	Hs.119357	ESTs	2.5
	438662	AA223599	Hs.6351	cleavage and polyadenylation specific fa	2.5
20	435760	AF231922	Hs.213004	chromosome 21 open reading frame 62	2.5
	427513	AI476318	Hs.192480	ESTs	2.5
	430061	AB037817	Hs.230188	KIAA1396 protein	2.5
	435923	BE301930	Hs.5010	Homo sapiens clone 24572 mRNA sequence	2.5
	417123	BE326521	Hs.159450	ESTs	2.5
25	439699	AF086534	Hs.187561	ESTs, Moderately similar to ALU1_HUMAN A	2.5
	412980	AI815750	Hs.20977	hypothetical protein MGC3129 similar to	2.5
	427209	H06509	Hs.92423	KIAA1566 protein	2.5
	424327	AA431707	Hs.31209	ESTs	2.5
	436340	R42246	Hs.21606	ESTs	2.5
30	450650	T65617	Hs.101257	hypothetical protein MGC3295	2.5
	439444	AI277652	Hs.54578	ESTs, Weakly similar to I38022 hypotheti	2.5
	400777			ESTs	2.5
	439478	AF049460	Hs.6574	deformed epidermal autoregulatory factor	2.5
35	450407	NM_000810	Hs.24969	gamma-aminobutyric acid (GABA) A recepto	2.5
	450385	AI631024	Hs.24948	synuclein, alpha interacting protein [sy	2.5
	432558	R97268	Hs.177269	ESTs	2.5
	400860			ESTs	2.5
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	2.5
	416063	BE047699	Hs.93454	ESTs	2.5
40	414998	NM_002543	Hs.77729	oxidised low density lipoprotein (lectin	2.5
	452823	AB012124	Hs.30696	transcription factor-like 5 (basic helix	2.5
	417791	AW965339	Hs.111471	ESTs	2.5
	418079	R40058	Hs.6911	ESTs	2.5
	408495	W68796	Hs.237731	ESTs	2.5
45	442104	L20971	Hs.188	phosphodiesterase 4B, cAMP-specific (dun	2.5
	437370	AL359567	Hs.161962	Homo sapiens mRNA; cDNA DKFZp547D023 (fr	2.5
	429803	W81489	Hs.223025	RAB31, member RAS oncogene family	2.5
	424959	NM_005781	Hs.153937	activated p21cdc42Hs kinase	2.5
	427413	BE547647	Hs.177781	hypothetical protein MGC5618	2.5
50	408955	BE315170	Hs.8087	NAG-5 protein	2.5
	415261	T40928	Hs.8346	ESTs	2.5
	415716	N59294	Hs.179662	nucleosome assembly protein 1-like 1	2.5
	417873	BE266659	Hs.293659	Homo sapiens, Similar to RIKEN cDNA A430	2.5
	418388	R72332	Hs.29258	Homo sapiens cDNA FLJ11364 fs, clone HE	2.5
55	421002	AF116030	Hs.100932	transcription factor 17	2.5
	423244	AL039379	Hs.209602	ESTs, Weakly similar to ubiquitous TPR m	2.5
	423553	AA405635	Hs.96854	ESTs, Weakly similar to DYLLX_HUMAN CYTOP	2.5
	427981	AW293165	Hs.143134	ESTs	2.5
	428301	AW628666	Hs.98440	ESTs, Weakly similar to I38022 hypotheti	2.5
60	428858	BE252383	Hs.184668	SBB31 protein	2.5
	428858	AA436760		gb:zv67d11.1 Soares_total_fetus_Nb2HF8_	2.5
	428943	AW086180	Hs.37636	ESTs, Weakly similar to KIAA1392 protein	2.5
	432427	AL037630	Hs.6638	Homo sapiens cDNA FLJ111602 fs, clone HE	2.5
	435347	AW014873	Hs.116963	ESTs	2.5
65	437949	U78519	Hs.41654	ESTs, Weakly similar to A46010 X-linked	2.5
	438208	AL041224	Hs.65379	ESTs	2.5
	440286	U29589	Hs.7138	cholinergic receptor, muscarinic 3	2.5
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALUF_HUMAN !!!!	2.5
	441805	AA285136	Hs.301914	neuronal specific transcription factor D	2.5
70	442337	AI371029	Hs.129257	ESTs, Weakly similar to TC17_HUMAN TRANS	2.5
	442789	AW904361	Hs.131191	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.5
	445556	AI910241	Hs.12887	actin-related protein 3-beta	2.5
	449086	AI628357	Hs.208037	ESTs	2.5
	459583	AI907873		gb:IL-BT152-080399-004 BT152 Homo sapien	2.5
75	TABLE 24B:				
	Play:	Unique Eas probeset identifier number			
	CAT number:	Gene cluster number			
	Accession:	Genbank accession numbers			
80	Play	CAT Number	Accession		
	408432	1058667_1	AW195262 R27868 AW811262		
	412225	1284108_1	AW902042 N77591		
	412436	129439_1	AA655089 AA135130 AA484059 AA102419 AW877765		

5	416120	1571266_1	H46739 H51513 H19779
	416871	1626761_1	H98716 N90792 N24263
	416913	163001_1	AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499
	422864	222336_1	AA318323 H11145 R15289 AA451945 AA476690 AA436954 Z43802 F11753 T65491 D81821
	422949	223184_1	AA319435 N56456 AA318377 AW961532 T48452 AA894424
	422977	223410_1	AA631498 AJ017191 AA491211 AA761823 AA714555 AA768099 AA808286 AJ934069 AA570223 AA574389 AA582438 AI745346 AW964510 AA319642
			AW853758 H56414
10	423756	231725_1	AA828125 AA834883 AA330555
	425168	247552_1	R96366 AL133929 AA351636 H78818 AA477084 Z28957 H80194
	425517	252729_1	AF121179 BE162736 AA358827
	426413	266650_1	AA377823 AW954494 AI022688
	428002	285602_1	AA418703 AA418711 BE071915 BE071920 BE071912
	428679	294049_1	AA431765 AA432015
15	428858	298453_1	AA436760 AW237453 BE327496 H47347 N56967
	429007	298301_1	D80642 AA443145 AL119015 AW904500
	429163	300543_1	AA884766 AW974271 AA592975 AA447312
	433532	368950_1	AW975367 AA598607 AA742735
	436190	41555_1	AK001059 AA633055
20	437034	431713_1	AA742643 AA808575 AW976668
	438458	457837_1	AW975186 AA807807 D29548
	438993	467651_1	AA828995 AA834879 AI926361
	439666	47387_1	AF086387 W77684 W72711
	440322	491966_1	AA879430 BE070262 BE070493 BE070272 BE070484 BE070397 BE070396 BE070201 BE070198 BE070404 BE070270 BE070400
25	444584	611496_1	AJ168422 D80113 T59074
	447197	711623_1	R36075 AJ366546 R36187
	448451	764066_1	AW015994 R38898 AW000978 AJ588202 AJ521706
	450625	84032_1	AW970107 AA513951 AA010406
	452453	918300_1	AI902519 AI902518 AI902516
30	454996	1248640_1	AW850180 AW850326
	455350	1283853_1	AW901809 AW901787 AW901795 AW901792 AW901744 AW901753 AW901807 AW901798

TABLE 24C:

35	Pkey:	Unique number corresponding to an Eos probeset
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
	Strand:	Indicates DNA strand from which exons were predicted.
	NI_position:	Indicates nucleotide positions of predicted exons.

40	Pkey	Ref	Strand	NI_position
	400777	8131663	Plus	70745-71121
	400780	8131663	Minus	118372-118619
	400859	9757499	Minus	91888-92018,98131-98294,99474-99570
	400860	9757499	Minus	151830-152104,152649-152744
45	400992	8096828	Plus	140390-140822
	401324	9863791	Plus	234057-234174
	402408	9796239	Minus	110326-110491
	402604	9909420	Plus	20393-20767
	402605	9909420	Minus	47680-47973
50	402693	8569863	Minus	82366-82515
	402855	9662953	Minus	59763-59909
	404029	7671252	Plus	108716-111112
	404048	3688074	Minus	54421-56808
	404049	3688074	Minus	75765-78155
55	404283	2276311	Minus	99460-99564
	404299	5738652	Minus	3826-4025
	404541	8318559	Plus	103456-103664
	404584	9857511	Plus	138651-139153
	404593	9944086	Minus	74922-75788
60	404721	9856648	Minus	173763-174294
	404819	4678240	Plus	16223-16319,16427-16513,16736-16859,16941-17075,17170-17287,17389-17529,18261-18357,18443-18578
	405238	7249119	Minus	51728-51836
	405771	7018349	Plus	91191-91254,91510-91589
	405819	4007557	Plus	2830-2967
65	406311	9211559	Minus	137114-139033

TABLE 25A: ABOUT 1202 GENES UP-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CENTRAL NERVOUS SYSTEM (CNS)

Table 25A lists about 1202 genes up-regulated in glioblastoma compared to normal adult central nervous system (CNS). These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" glioblastoma to "average" normal adult CNS tissues was greater than or equal to 2.0. The "average" glioblastoma level was set to the 75<sup>th</sup> percentile amongst various glioblastoma tumors. The "average" normal adult CNS tissue level was set to the 95<sup>th</sup> percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

70	Pkey:	Unique Eos probeset identifier number
	ExAccn:	Exemplar Accession number, Genbank accession number
75	UnigeneID:	Unigene number
	Unigene Title:	Unigene gene title
	R1:	Ratio of 75 <sup>th</sup> percentile tumor to 95 <sup>th</sup> percentile normal adult nervous system tissue

80	Pkey	ExAccn	UnigeneID	Unigene Title	R1
	452461	N78223	Hs.108106	transcription factor	20.1
	436895	AF037335	Hs.5338	carbonic anhydrase XII	15.2
	453941	U39917	Hs.35820	Bloom syndrome	14.2
	443247	BE614387	Hs.333893	c-Myc target JPO1	12.4

	428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	12.0
	447342	AI199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	11.7
	422183	AF027208	Hs.112360	prominin (mouse)-like 1	11.4
5	439451	AF086270	Hs.278554	heterochromatin-like protein 1	11.2
	424800	AL035588	Hs.153203	MyoD family inhibitor	10.2
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	10.0
	444190	AB78918	Hs.10526	cysteine and glycine-rich protein 2	9.9
	412140	AA219691	Hs.73625	RAB6 interacting, kinesin-like (rabklins	9.9
10	449340	AW235786	Hs.195359	hypothetical protein MGC10954	9.8
	409731	AA125985	Hs.56145	thymosin, beta, identified in neuroblast	9.4
	439978	BE139460	Hs.124673	Homo sapiens cDNA FLJ11477 fs, clone HE	8.9
	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	8.9
	456516	BE172704	Hs.222746	KIAA1810 protein	8.2
15	420092	AA814043	Hs.68045	ESTs	7.9
	422631	BE218919	Hs.118793	hypothetical protein FLJ10688	7.9
	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	7.9
	438527	A969251	Hs.115325	RAB7, member RAS oncogene family-like 1	7.9
	427581	NM_014788	Hs.179703	KIAA0129 gene product	7.8
20	418661	NM_001949	Hs.1189	E2F transcription factor 3	7.8
	440684	AI253123	Hs.127356	ESTs, Highly similar to S21424 nestin [H	7.8
	429843	AA455889	Hs.167279	FYVE-finger-containing Rab5 effector pro	7.7
	409638	AW450420	Hs.21335	ESTs	7.5
	444665	BE613126	Hs.47783	B aggressive lymphoma gene	7.5
25	456759	BE259150	Hs.127792	delta (Drosophila)-like 3	7.5
	412777	AJ335773	Hs.270123	ESTs	7.4
	436607	AW661783	Hs.211061	ESTs	7.3
	432058	AW665996	Hs.130729	ESTs, Weakly similar to ALU1_HUMAN ALU S	7.3
	417061	AB75944	Hs.188691	Homo sapiens cDNA FLJ12033 fs, clone HE	7.3
30	428976	AL037824	Hs.194695	ras homolog gene family, member 1	7.2
	433244	AB040943	Hs.271285	KIAA1510 protein	7.1
	436726	AA324975	Hs.128993	ESTs, Weakly similar to T00079 hypotheri	7.1
	408432	AW195262		gb:xn67b05.s1 NCI_CGAP_CML1 Homo sapiens	7.1
	434164	AW207019	Hs.148135	serine/threonine kinase 33	7.0
35	445873	AA250970	Hs.251946	poly(A)-binding protein, cytoplasmic 14	7.0
	439726	AW449893	Hs.293707	ESTs, Weakly similar to t38598 zinc finger	7.0
	432656	NM_000246	Hs.3076	MHC class II transactivator	6.8
	431117	AF003522	Hs.250500	delta (Drosophila)-like 1	6.8
	453387	AI990741	Hs.252809	ESTs	6.8
40	418821	AA436002	Hs.183161	ESTs	6.6
	437034	AA742643		gb:ny91c01.s1 NCI_CGAP_GCB1 Homo sapiens	6.6
	411252	AB018549	Hs.69328	MD-2 protein	6.5
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	6.4
	452953	AI932884	Hs.271741	ESTs, Weakly similar to A46010 X-linked	6.3
45	433532	AW975367		gb:EST387475 MAGE resequences, MAGN Homo	6.3
	420311	AW445044	Hs.38207	Human DNA sequence from clone RP4-53015	6.3
	418097	R45137	Hs.21868	ESTs	6.2
	407304	AA565832		gb:nj32b03.s1 NCI_CGAP_AA1 Homo sapiens	6.2
	435256	AF193766	Hs.13872	cytokine-like protein C17	6.1
50	449448	D60730	Hs.57471	ESTs	6.1
	403790				6.0
	425517	AF121179		gb:AF121179 Homo sapiens liver (Chang L-	6.0
	420674	NM_000055	Hs.1327	butyrylcholinesterase	6.0
55	435542	AA887376	Hs.269533	ESTs	5.9
	418216	AA662240	Hs.283099	AF15q14 protein	5.8
	439086	AF085947		gb:Homo sapiens full length insert cDNA	5.8
	408037	AW271720	Hs.42233	hypothetical protein FLJ10300	5.7
	412225	AW902042		gb:QV0-NN1022-170400-193-c02 NN1022 Homo	5.7
	436109	AA922153	Hs.132760	hypothetical protein MGC15729	5.7
60	435005	U80743	Hs.306094	trinucleotide repeat containing 12	5.7
	429149	AW193360	Hs.197962	ESTs, Weakly similar to I38022 hypotheri	5.7
	418113	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	5.6
	405558				5.6
	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	5.6
65	442547	AA306997	Hs.217484	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.6
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	5.5
	420560	AW207748	Hs.59115	ESTs	5.5
	408096	BE250162	Hs.83765	dihydrofolate reductase	5.5
	443539	AI076182	Hs.134074	ESTs, Moderately similar to ALU6_HUMAN A	5.4
70	426318	AA375125	Hs.147112	Homo sapiens cDNA: FLJ22322 fs, clone H	5.4
	429115	AA446728	Hs.289020	Homo sapiens cDNA FLJ14098 fs, clone MA	5.3
	453900	AW003582	Hs.226414	ESTs, Weakly similar to ALU8_HUMAN ALU S	5.3
	444168	AW379879		gb:RC1-HT0256-081199-011-01 HT0256 Homo	5.3
	432789	D26361	Hs.3104	KIAA0042 gene product	5.3
75	437036	AI571514	Hs.133022	ESTs	5.2
	421247	BE391727	Hs.102910	general transcription factor IIH, polype	5.2
	441523	AW514263	Hs.301771	ESTs, Weakly similar to ALU1_HUMAN IIII	5.2
	451106	BE382701	Hs.25960	v-myc avian myelocytomatosis viral relat	5.1
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	5.1
80	454157	AW162906	Hs.312481	ESTs, Weakly similar to S66668 hydrogen	5.1
	423343	AA324643	Hs.246106	ESTs	5.1
	425292	NM_005824	Hs.155545	37 kDa leucine-rich repeat (LRR) protein	5.1
	406679	AA070786		gb:zm66b07.s1 Stratagene neuroepithelium	5.1
	442671	AI005668	Hs.134779	EST	5.1

	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	5.0
	418819	AA228776	Hs.191721	ESTs	5.0
	432946	U60899	Hs.279854	mannosidase, alpha, class 2B, member 1	4.9
5	420730	NM_002691	Hs.99890	polymerase (DNA directed), delta 1, cata	4.9
	441217	A922183	Hs.213246	ESTs	4.9
	453385	AW296101	Hs.252806	ESTs	4.8
	418203	X54942	Hs.83758	CDC28 protein kinase 2	4.7
	450813	A1739625	Hs.203376	ESTs	4.7
10	444006	BE395085	Hs.10086	type I transmembrane protein Fn14	4.7
	412530	AA766268	Hs.266273	hypothetical protein FLJ13346	4.7
	431070	AW408164	Hs.249184	transcription factor 19 (SC1)	4.7
	429786	AL080232	Hs.220696	Homo sapiens mRNA; cDNA DKFZp586A061 (tr	4.7
	405771				4.6
15	457065	AI476318	Hs.192480	ESTs	4.6
	436190	AK001059		gb:Homo sapiens cDNA FLJ10197 fs, clone	4.6
	400859				4.6
	435267	N23797	Hs.110114	ESTs	4.6
	443454	A1057494	Hs.133421	ESTs	4.5
20	452811	AA937079	Hs.118983	hypothetical protein FLJ12150	4.5
	437267	AW511443	Hs.258110	ESTs	4.5
	435020	AW505076	Hs.301855	DiGeorge syndrome critical region gene 8	4.5
	454269	A1961060	Hs.129908	KIAA0591 protein	4.5
	422106	D84239	Hs.111732	Fc fragment of IgG binding protein	4.5
25	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	4.5
	456534	X91195	Hs.100623	phospholipase C, beta 3, neighbor pseudo	4.5
	423756	AA828125		gb:cd71a09.s1 NCI_CGAP_Ov2 Homo sapiens	4.5
	417308	H80720	Hs.81892	KIAA0101 gene product	4.5
	422170	A1791949	Hs.112432	anti-Mullerian hormone	4.4
30	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotoxic)	4.4
	406568	AF088886	Hs.11590	cathepsin F	4.4
	426812	AF105365	Hs.172613	solute carrier family 12 (potassium/chio	4.4
	402516				4.4
	432865	A1753709	Hs.152484	ESTs, Weakly similar to I38022 hypotheti	4.4
35	413625	AW451103	Hs.71371	ESTs	4.4
	436098	R20597	Hs.9739	glycerol-3-phosphate dehydrogenase 1 (so	4.4
	418333	W92113		gb:zh48e01.r1 Soares_fetal_liver_spleen_	4.4
	416933	BE561850	Hs.80506	small nuclear ribonucleoprotein polypept	4.4
	438192	A1859065	Hs.337620	Homo sapiens AFG3L1 isoform 1 mRNA, part	4.3
40	457374	AA493662		gb:nh05d12.s1 NCI_CGAP_Thy1 Homo sapiens	4.3
	433159	AB035898	Hs.150587	kinesin-like protein 2	4.3
	444386	BE065183		gb:RC1-BT0314-020200-012-c04 BT0314 Homo	4.3
	453202	AW085781	Hs.26270	hypothetical protein FLJ11588	4.3
	441020	W79283	Hs.35962	ESTs	4.3
45	414733	BE514535	Hs.77171	minichromosome maintenance deficient (S,	4.3
	407902	AL117474	Hs.41181	Homo sapiens mRNA; cDNA DKFZp727C191 (tr	4.3
	405701				4.3
	451659	BE379761	Hs.14248	ESTs	4.3
	418845	AA852985	Hs.89232	chromobox homolog 5 (Drosophila HP1 alph	4.2
50	433323	AA805132	Hs.30701	ESTs	4.2
	439811	AA135332	Hs.71608	ESTs	4.2
	415406	T26510		gb:AB282F8R Infant brain, LLNL array of	4.2
	436282	R91913	Hs.272104	ESTs, Moderately similar to ALU1_HUMAN A	4.1
	441269	AW015206	Hs.178784	ESTs	4.1
55	418727	AA227809	Hs.94834	ESTs	4.1
	433006	BE242758	Hs.190223	ESTs, Moderately similar to T29285 hypot	4.1
	436480	AJ271643	Hs.87469	putative acid-sensing ion channel	4.1
	430786	AA486144	Hs.31293	ESTs	4.1
	445372	N36417	Hs.144928	ESTs	4.1
60	410555	U92849	Hs.64311	a disintegrin and metalloproteinase doma	4.0
	457485	AW301344	Hs.122908	DNA replication factor	4.0
	422094	AF129535	Hs.272027	F-box only protein 5	4.0
	442029	AW956698	Hs.14456	neural precursor cell expressed, develop	4.0
	459321	AW044477	Hs.299538	ESTs	4.0
65	421308	AA687322	Hs.192843	leucine zipper protein FKSG14	4.0
	420567	AK000812	Hs.98874	similar to proline-rich protein 48	4.0
	447004	AW296968	Hs.157539	ESTs	4.0
	448295	AJ381911	Hs.334859	KIAA1814 protein	3.9
	439699	AF086534	Hs.187561	ESTs, Moderately similar to ALU1_HUMAN A	3.9
70	440704	M69241	Hs.162	insulin-like growth factor binding prote	3.9
	453096	AW294631	Hs.11325	ESTs	3.9
	457026	AA397620	Hs.48692	ESTs	3.9
	404842				3.9
	450375	AA009647	Hs.8850	a disintegrin and metalloproteinase doma	3.9
75	430132	AA204686	Hs.234149	hypothetical protein FLJ20647	3.9
	437718	A1927288	Hs.196779	ESTs	3.9
	438490	AW593272	Hs.301299	ESTs	3.9
	429919	AA460692	Hs.278945	hypothetical protein FLJ23024	3.9
	413604	R51767		gb:yg73g11.r1 Soares infant brain 1N1B H	3.9
80	425599	AW366745	Hs.214140	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.9
	448796	AA147829	Hs.301431	endothelial zinc finger protein induced	3.9
	449300	A1656959	Hs.222165	ESTs	3.8
	452203	X57522	Hs.158164	transporter 1, ATP-binding cassette, sub	3.8
	425769	U72513	Hs.159488	Human RPL13-2 pseudogene mRNA, complete	3.8

	404295				3.8
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	3.8
	428728	NM_016625	Hs.191381	hypothetical protein	3.8
	409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromoso	3.8
5	430172	AA468591	Hs.161889	ESTs	3.8
	447499	AW262580	Hs.147674	protocadherin beta 16	3.8
	405884				3.8
	437236	AW137817	Hs.244353	ESTs	3.7
10	418883	BE387036	Hs.1211	acid phosphatase 5, tartrate resistant	3.7
	444143	AW747996	Hs.160999	ESTs, Moderately similar to A56194 throm	3.7
	425529	NM_014656	Hs.158282	KIAA0040 gene product	3.7
	425502	R98895	Hs.125823	ESTs	3.7
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	3.7
	402424				3.7
15	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	3.7
	434072	H70854	Hs.283059	Homo sapiens PRO1082 mRNA, complete cds	3.7
	414872	U82010	Hs.77513	COX10 (yeast) homolog, cytochrome c oxid	3.7
	426071	AW138057	Hs.163835	ESTs	3.7
20	419078	M93119	Hs.89584	insulinoma-associated 1	3.7
	428037	N47474	Hs.89230	potassium intermediate/small conductance	3.7
	416547	H82914	Hs.268946	ESTs, Weakly similar to PC4259 ferritin	3.7
	436899	AA764852	Hs.291567	ESTs	3.6
	436722	AW975977		gb:EST388085 MAGE resequences, MAGN Homo	3.6
25	440652	A1216751	Hs.143977	ESTs	3.6
	428450	NM_014791	Hs.184339	KIAA0175 gene product	3.6
	452103	R42764	Hs.339654	ESTs, Weakly similar to I38022 hypotheti	3.6
	409048	H59990	Hs.37699	ESTs	3.6
	439546	AF088056		gb:Homo sapiens full length insert cDNA	3.6
30	443544	A1076315	Hs.163359	ESTs	3.6
	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	3.6
	435889	A1249107	Hs.269901	ESTs	3.6
	420301	AA767526	Hs.22030	paired box gene 5 (B-cell lineage specifi	3.6
	438078	A1016377	Hs.131693	ESTs	3.6
35	408420	NM_006915	Hs.44766	retinitis pigmentosa 2 (X-linked recessi	3.6
	416871	H98716		gb:yx13d08.s1 Soares melanocyte 2NbHM Ho	3.5
	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	3.5
	446291	BE397753	Hs.14623	interferon, gamma-inducible protein 30	3.5
	432281	AK001239	Hs.274263	hypothetical protein FLJ10377	3.5
40	436123	AA057484	Hs.35406	ESTs, Highly similar to unnamed protein	3.5
	411256	AW834039		gb:QV0-TT0010-091199-053-e09 TT0010 Homo	3.5
	419239	AA468183	Hs.184598	Homo sapiens cDNA: FLJ23241 fs, clone C	3.5
	435065	BE084391		gb:RC4-BT0310-110300-015-b08 BT0310 Homo	3.5
	435632	AW291488	Hs.117305	Homo sapiens, clone IMAGE:3682908, mRNA	3.5
45	447101	N72185	Hs.44189	ESTs	3.5
	410530	M25809	Hs.84173	ATPase, H+ transporting, lysosomal (vacu	3.5
	422156	N34524		gb:yy56d10.s1 Soares multiple sclerosis	3.5
	453616	NM_003462	Hs.33846	dysenin, axonemal, light intermediate pol	3.5
50	439743	AL389956	Hs.283858	Homo sapiens mRNA full length insert cDN	3.5
	453884	AA355925	Hs.36232	KIAA0188 gene product	3.5
	424954	NM_000546	Hs.1846	tumor protein p53 (Li-Fraumeni syndrome)	3.5
	420721	AA927802	Hs.159471	ZAP3 protein	3.5
	426764	AA732524	Hs.151464	ESTs, Weakly similar to ALUC_HUMAN !!!!	3.4
	420649	A1866964	Hs.124704	ESTs, Moderately similar to S65657 alpha	3.4
55	448831	AL080123	Hs.22182	zinc finger protein 23 (KOX 18)	3.4
	444371	BE540274	Hs.239	forkhead box M1	3.4
	402604				3.4
	442407	AW469584	Hs.32353	mitogen-activated protein kinase kinase	3.4
	414300	A1304870	Hs.188680	ESTs	3.4
60	444670	H58373	Hs.332938	hypothetical protein MGC5370	3.4
	414550	BE379808		gb:60115956771 NIH_MGC_53 Homo sapiens c	3.4
	452211	A1985513	Hs.233420	ESTs	3.4
	414416	AW409985	Hs.76084	hypothetical protein MGC2721	3.4
	449961	AW265634	Hs.133100	ESTs	3.4
65	413257	BE075035		gb:PM3-BT0584-260300-002-g05 BT0584 Homo	3.4
	453857	AL080235	Hs.35861	DKFZP585E1621 protein	3.4
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	3.4
	422848	BE513934	Hs.1583	neutrophil cytosolic factor 1 (47kD, chr	3.4
	446189	H85224	Hs.214013	ESTs	3.4
70	437385	AA757055	Hs.164060	ESTs	3.4
	453652	AW009640	Hs.28368	ESTs, Moderately similar to S65657 alpha	3.4
	408298	AJ745325	Hs.271923	Homo sapiens cDNA: FLJ22785 fs, clone K	3.4
	455778	BE088748		gb:CM2-BT0693-210300-123-d09 BT0693 Homo	3.3
	417546	H65569	Hs.18845	ESTs	3.3
75	412471	M63193	Hs.73946	endothelial cell growth factor 1 (platelet	3.3
	454631	AW811324		gb:ILJ3-ST0141-131099-017-A02 ST0141 Homo	3.3
	454294	AB000734	Hs.50640	JAK binding protein	3.3
	457131	AC002310	Hs.301463	Human Chromosome 18 BAC clone C17987SK-A	3.3
	410102	AW248508	Hs.279727	Homo sapiens cDNA FLJ14035 fs, clone HE	3.3
80	449676	AW380579	Hs.209657	ESTs	3.3
	436211	AK001581	Hs.334828	hypothetical protein FLJ10719; KIAA1794	3.3
	453746	AL120611		gb:DKFZp761H119_r1 761 (synonym: hamy2)	3.3
	452799	AJ948829	Hs.213788	ESTs	3.3
	435380	AA679001	Hs.192221	ESTs	3.3

	426746	J03626	Hs.2057	uridine monophosphate synthetase (procat	3.3
	453362	H14988	Hs.107375	ESTs	3.3
	456473	A1202788	Hs.25682	Homo sapiens mRNA for KIAA1863 protein,	3.3
	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fs, clone PL	3.3
5	445777	A1580371	Hs.145384	ESTs	3.3
	423757	AL049337	Hs.132571	Homo sapiens mRNA; cDNA DKFZp564P016 (fr	3.3
	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fs, clone CO	3.3
	404299				3.3
	404108				3.3
10	425189	H16622		gb:ym26c07.r1 Soares Infant brain 1N18 H	3.3
	449318	AW236021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	3.3
	450193	AJ916071	Hs.15607	Homo sapiens Fanconi anemia complementat	3.2
	427725	U68839	Hs.180533	mitogen-activated protein kinase kinase	3.2
15	424051	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (f	3.2
	418968	NM_000078	Hs.89538	cholesterol ester transfer protein, plas	3.2
	449248	M33782	Hs.23391	Homo sapiens, Similar to transcription f	3.2
	439416	W58294	Hs.56254	ESTs	3.2
	401596	AA172106	Hs.110950	Rag C protein	3.2
20	408380	AF123050	Hs.44532	diubiquitin	3.2
	450325	A935962	Hs.26289	ESTs	3.2
	428730	AA625947	Hs.25750	ESTs	3.2
	457536	AA305233	Hs.278712	eukaryotic translation initiation factor	3.2
	426836	N41720	Hs.172684	vesicle-associated membrane protein 8 (e	3.2
25	442710	AJ015631	Hs.23210	ESTs	3.2
	435232	NM_001262	Hs.4854	cyclin-dependent kinase inhibitor 2C (p1	3.2
	430970	AJ018210	Hs.144083	ESTs	3.2
	416192	NM_005036	Hs.998	peroxisome proliferative activated recep	3.2
	446676	H09380	Hs.300965	ESTs	3.2
30	451459	AJ797515	Hs.270560	ESTs, Moderately similar to ALU7_HUMAN A	3.2
	407603	AW955705	Hs.62604	Homo sapiens, clone IMAGE:4299322, mRNA,	3.2
	413840	AJ301558	Hs.146381	RNA binding motif protein, X chromosome	3.2
	448751	BE551203	Hs.201792	ESTs	3.2
	432593	AW301003	Hs.51483	ESTs, Weakly similar to hypothetical pro	3.2
35	458786	AJ457098	Hs.280848	ESTs	3.2
	455909	BE156417	Hs.278798	ESTs	3.2
	419311	AA689591		gb:mv66a12.s1 NCL CGAP GC81 Homo sapiens	3.2
	439710	AF086543		gb:Homo sapiens full length insert cDNA	3.2
	434559	AF147315		gb:Homo sapiens full length insert cDNA	3.1
40	455800	R22479	Hs.167073	Homo sapiens cDNA FLJ13047 fs, clone NT	3.1
	436703	AW880614	Hs.146381	RNA binding motif protein, X chromosome	3.1
	414799	AJ752416	Hs.77326	insulin-like growth factor binding prote	3.1
	437860	AA333063	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	3.1
	434182	W20309	Hs.118520	G-protein gamma-12 subunit	3.1
45	417900	BE250127	Hs.82906	CDC20 (cell division cycle 20, S. cerevi	3.1
	434769	AA648884	Hs.134278	Homo sapiens cDNA FLJ12676 fs, clone NT	3.1
	414825	X06370	Hs.77432	epidermal growth factor receptor (avian	3.1
	426413	AA377823		gb:EST90805 Synovial sarcoma Homo sapien	3.1
	447959	AJ452784	Hs.270270	ESTs, Weakly similar to 2109260A B cell	3.1
50	404589				3.1
	421764	AJ681535	Hs.148135	serine/threonine kinase 33	3.1
	419986	AJ345455	Hs.78915	GA-binding protein transcription factor,	3.1
	416941	BE000150	Hs.48778	nban protein	3.1
	414761	ALU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	3.1
55	449611	AJ970394	Hs.197075	ESTs	3.1
	434746	AA648368	Hs.295368	ESTs	3.1
	434274	AA628539	Hs.118252	ESTs, Moderately similar to ALU1_HUMAN A	3.1
	427899	AA829286	Hs.332053	serum amyloid A1	3.1
	417642	BE302665	Hs.105461	hypothetical protein FLJ20357	3.1
60	452472	AW957300	Hs.294142	ESTs, Weakly similar to C55663 oligodend	3.1
	446131	NM_000929	Hs.290	phospholipase A2, group V	3.1
	440052	AJ633744	Hs.195648	ESTs, Weakly similar to I38022 hypotheti	3.1
	426531	AA381071		gb:EST94100 Activated T-cells XII Homo s	3.1
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	3.1
65	406267				3.1
	447039	AV661788	Hs.282915	ESTs	3.1
	404802				3.1
	406927	M26460		gb:Homo sapiens (clone 104) retinoblasto	3.1
	419314	AW971924	Hs.87280	ESTs	3.0
70	435894	AJ076687	Hs.188011	ESTs	3.0
	432140	AK000404	Hs.272688	hypothetical protein FLJ20397	3.0
	443426	AF098158	Hs.9329	chromosome 20 open reading frame 1	3.0
	425202	AW962282	Hs.152049	ESTs, Weakly similar to I38022 hypotheti	3.0
	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	3.0
75	418241	M26682	Hs.1149	UIM domain only 1 (rhombotin 1)	3.0
	446599	Z37832	Hs.15476	differentially expressed in FDCP (mouse	3.0
	412950	BE018581	Hs.245342	hypothetical protein FLJ14642	3.0
	428670	AA431682	Hs.134832	ESTs	3.0
	446975	BE246446	Hs.16695	ubiquitin-activating enzyme E1-like	3.0
80	437756	AA767537	Hs.197096	ESTs	3.0
	416084	L16991	Hs.79006	deoxythymidylate kinase (thymidylate kin	3.0
	402374	AL135225	Hs.301865	dopachrome tautomerase (dopachrome delta	3.0
	443885	H91806	Hs.15284	ESTs	3.0
	434008	AA740878	Hs.112982	ESTs	3.0

5	452568	AA805634	Hs.300870	Homo sapiens mRNA; cDNA DKFZp547M072 (tr	3.0
	414239	AI288330	Hs.182330	ESTs	3.0
	421013	M62397	Hs.1345	mutated in colorectal cancers	3.0
	424635	AA420687	Hs.115455	Homo sapiens cDNA FLJ14259 fs, clone PL	3.0
	410276	AI554545	Hs.68301	ESTs	3.0
10	433865	N29862	Hs.44104	ESTs	3.0
	406028				3.0
	401626				3.0
	415949	H10562	Hs.21691	ESTs	3.0
	418583	AA604379	Hs.86211	hypothetical protein	3.0
15	417933	X02308	Hs.82962	thymidylate synthetase	3.0
	434577	R37316	Hs.179769	Homo sapiens cDNA: FLJ22487 fs, clone H	3.0
	430437	AI768801	Hs.169943	Homo sapiens cDNA FLJ13569 fs, clone PL	3.0
	427940	AA417812	Hs.38775	ESTs	2.9
	456060	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fs, clone MA	2.9
20	421988	AW450481	Hs.161333	ESTs	2.9
	448775	AB025237	Hs.388	nudix (nucleoside diphosphate linked mol	2.9
	438598	AI805943	Hs.326067	hypothetical protein MGC5178	2.9
	429612	AF062649	Hs.252587	pituitary tumor-transforming 1	2.9
	451189	AA016019	Hs.40905	ESTs	2.9
25	401558				2.9
	426207	BE390657	Hs.30026	HSPC182 protein	2.9
	404721				2.9
	401384				2.9
	417288	AI984792	Hs.108812	hypothetical protein FLJ22004	2.9
30	427648	AI376722	Hs.180062	proteasome (prosome, macropain) subunit,	2.9
	435928	H84345	Hs.183961	ESTs	2.9
	431740	N75450	Hs.183412	ESTs, Moderately similar to AF116721 67	2.9
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholenergic	2.9
	439972	AJ348100	Hs.124662	ESTs	2.9
35	433112	AA973801	Hs.144553	ESTs, Weakly similar to unnamed protein	2.9
	423751	AW235633	Hs.46525	ESTs	2.9
	406748	AW339106	Hs.217433	annexin A2	2.9
	422154	T79045	Hs.126927	ESTs	2.9
	405588				2.9
40	440911	AA909536	Hs.143562	ESTs	2.9
	412420	AL035668	Hs.73853	bone morphogenetic protein 2	2.9
	445043	AW014413	Hs.196066	ESTs	2.9
	410114	AW590540	Hs.271280	ESTs	2.9
	419217	AA504571		gb:aa60e12.r1 NCI_CGAP_GCB1 Homo sapiens	2.9
45	415849	R20529	Hs.6806	ESTs	2.9
	448140	AF146761	Hs.20450	BCM-like membrane protein precursor	2.9
	453331	AI240665	Hs.8895	ESTs	2.9
	432065	AA401039	Hs.2903	protein phosphatase 4 (formerly X), cata	2.9
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	2.9
50	454377	AA076811		gb:7B03C12 Chromosome 7 Fetal Brain cDNA	2.9
	421491	H99999	Hs.42736	ESTs	2.9
	452291	AF015592	Hs.28853	CDC7 (cell division cycle 7, S. cerevisi	2.8
	415446	F08898	Hs.66075	ESTs	2.8
	439518	V76326		gb:zd60d04.r1 Soares_fetal_heart_NbHH19W	2.8
55	427221	L15409	Hs.174007	von Hippel-Lindau syndrome	2.8
	422493	AW474183	Hs.250173	hypothetical protein FLJ13158	2.8
	419451	AI907117	Hs.90535	synixin binding protein 2	2.8
	448789	BE539108	Hs.22051	hypothetical protein MGC15548	2.8
	424126	AA335635	Hs.96917	ESTs	2.8
60	458695	AV660159	Hs.282284	ESTs, Weakly similar to I38022 hypothesi	2.8
	418973	AA233056	Hs.191518	ESTs	2.8
	440471	AA886146	Hs.307944	ESTs	2.8
	421016	AA504583	Hs.101047	transcription factor 3 (E2A immunoglobul	2.8
	433647	AA603367	Hs.222294	ESTs	2.8
65	415817	U88987	Hs.78887	protein tyrosine phosphatase, receptor-1	2.8
	421723	AA620400	Hs.300717	sodium channel, voltage-gated, type III,	2.8
	434964	AI638850	Hs.130746	ESTs	2.8
	432022	AL162042	Hs.272348	Homo sapiens mRNA; cDNA DKFZp761L1212 (I	2.8
	400517	AF242388	Hs.149585	lengsin	2.8
70	433023	AW864793	Hs.87409	thrombospondin 1	2.8
	448734	BE614070	Hs.326416	Homo sapiens mRNA; cDNA DKFZp564H1916 (I	2.8
	406736	AI254733	Hs.182426	ribosomal protein S2	2.8
	409207	AW373564	Hs.194637	BANP homolog, SMAR1 homolog	2.8
	440196	N72847	Hs.125221	ESTs	2.8
75	403961				2.8
	425193	AW965689	Hs.22509	ESTs	2.8
	425268	AJ807883	Hs.180059	Homo sapiens cDNA FLJ20653 fs, clone KA	2.8
	440483	AI200836	Hs.150386	ESTs	2.8
	412391	AW947710		gb:RC0-MT0004-130300-011-e07 MT0004 Homo	2.8
80	448769	N66037	Hs.38173	ESTs	2.8
	411632	AW854829		gb:QV2-CT0261-201099-011-01 CT0261 Homo	2.8
	438221	AI798853	Hs.122224	ESTs, Weakly similar to ALUS_HUMAN ALU S	2.8
	457578	AA578027		gb:n20h01.a1 NCI_CGAP_HSC1 Homo sapiens	2.8
	455510	AA422029	Hs.143840	ESTs, Weakly similar to hyperpolarizatio	2.8
	447769	AW873704	Hs.320831	Homo sapiens cDNA FLJ14597 fs, clone NT	2.8
	427701	AA411101	Hs.243886	nuclear autoantigenic sperm protein (his	2.8
	433800	AI034361	Hs.135150	lung type-I cell membrane-associated gly	2.8

	439662	H97552	Hs.269060	ESTs	2.8
	425694	U51333	Hs.159237	hexokinase 3 (white cell)	2.8
	414747	U30872	Hs.77204	centromere protein F (350/400kD, mitosis	2.8
5	414598	AI094221	Hs.135150	lung type-I cell membrane-associated gly	2.8
	447752	M73700	Hs.105938	lactotransferrin	2.8
	408761	AA057264	Hs.238936	ESTs, Weakly similar to (define not ava	2.8
	453350	AI917771	Hs.51790	hypothetical protein FLJ23338	2.7
	456629	AW891965	Hs.279789	histone deacetylase 3	2.7
10	439538	AA837323	Hs.164047	ESTs	2.7
	458814	AM98957	Hs.170861	ESTs, Weakly similar to Z195_HUMAN ZINC	2.7
	456029	BE255990	Hs.218329	hypothetical protein	2.7
	451129	BE072881		gb:RC2-BT0548-200300-012-e09 BT0548 Homo	2.7
	456412	AW749617	Hs.280776	tankyrase, TRF1-interacting ankyrin-rela	2.7
15	453536	AA137000	Hs.62578	ESTs	2.7
	438378	AW970529	Hs.88434	hypothetical protein FLJ21816	2.7
	425745	U44060	Hs.14427	Homo sapiens cDNA: FLJ21800 fs, clone H	2.7
	446322	N23033	Hs.155814	ESTs	2.7
	451592	AI805416	Hs.213897	ESTs	2.7
20	429466	M85835	Hs.12827	ESTs	2.7
	429747	M87507	Hs.2490	caspase 1, apoptosis-related cysteine pr	2.7
	455514	AW883871		gb:RC1-HN0003-220300-021-h07 HN0003 Homo	2.7
	414732	AW410976	Hs.77152	minichromosome maintenance deficient (S.	2.7
	444207	AI565004	Hs.79572	cathepsin D (lysosomal aspartyl protease	2.7
25	427421	AA402414	Hs.3059	coatomer protein complex, subunit beta	2.7
	449655	AI021987	Hs.59970	ESTs	2.7
	422648	D86983	Hs.118893	Melanoma associated gene	2.7
	428494	AA233439	Hs.184634	hypothetical protein FLJ20005	2.7
	406895	X60648	Hs.172550	polypyrimidine tract binding protein (he	2.7
30	453255	AA278167	Hs.19215	Homo sapiens, clone IMAGE:3605822, mRNA	2.7
	427348	NM_014137	Hs.177258	PRO0650 protein	2.7
	435370	AI964074	Hs.225838	ESTs	2.7
	407852	BE548267	Hs.50724	Homo sapiens cDNA FLJ10934 fs, clone OV	2.7
	411874	AA096106	Hs.20403	ESTs	2.7
35	421192	AA833718	Hs.204529	KIAA1806 protein	2.7
	435899	W89093	Hs.189914	ESTs	2.7
	414603	R58394	Hs.25119	ESTs, Weakly similar to YEX0_YEAST HYPOT	2.7
	453462	AL037291	Hs.236605	ESTs, Moderately similar to ALU4_HUMAN A	2.7
	436554	AI985810	Hs.301173	ESTs	2.7
40	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S.	2.7
	403881				2.7
	431779	AW971178	Hs.268571	apolipoprotein C-I	2.7
	404984				2.7
	448275	BE514434	Hs.20830	kinesin-like 2	2.7
45	446839	BE091926	Hs.16244	mitotic spindle coiled-coil related prot	2.7
	411927	BE274009	Hs.772	glycogen synthase 1 (muscle)	2.7
	404756				2.7
	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	2.7
	422176	H80977		gb:yu89a11.s1 Soares fetal liver spleen	2.7
50	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	2.7
	436532	AA721522		gb:mv54h12r1 NCI_CGAP_Ew1 Homo sapiens	2.7
	412833	AW960547	Hs.298262	ribosomal protein S19	2.7
	457245	AI745498	Hs.204579	ESTs	2.7
	446881	AI696519	Hs.14427	Homo sapiens cDNA: FLJ21800 fs, clone H	2.7
55	453263	R91778	Hs.99369	ESTs	2.7
	459385	BE380047		gb:601159362F2 NIH_MGC_53 Homo sapiens c	2.7
	438764	AA824524	Hs.336452	ESTs	2.7
	429285	AI971081	Hs.20432	ESTs, Weakly similar to I38022 hypothe	2.7
	424853	BE549737	Hs.132967	Human EST clone 122887 mariner transpos	2.7
60	430037	BE409649	Hs.227789	mitogen-activated protein kinase-activat	2.7
	449892	N73608	Hs.50309	ESTs	2.7
	454201	AB023191	Hs.44131	KIAA0974 protein	2.7
	452279	AA286844	Hs.61260	hypothetical protein FLJ13164	2.7
	427954	J03060	Hs.247551	melanin 1	2.7
65	400371	U80740			2.7
	452449	AW068658	Hs.20943	ESTs	2.7
	431114	AA492400	Hs.291015	ESTs	2.7
	417088	M54915	Hs.81170	pim-1 oncogene	2.7
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	2.7
70	403680				2.7
	454679	AW813110		gb:CM4-ST0189-051099-021-f05 ST0189 Homo	2.7
	411968	AI207410	Hs.69280	Homo sapiens, clone IMAGE:3636299, mRNA,	2.6
	422240	R60594	Hs.29002	KIAA1706 protein	2.6
	424368	AB037766	Hs.146085	KIAA1345 protein	2.6
75	405808				2.6
	419700	AF084935	Hs.92357	galactokinase 1	2.6
	435972	W95088	Hs.114198	ESTs	2.6
	453568	S70782	Hs.557	adrenergic, alpha-1D-, receptor	2.6
	443725	AW245680	Hs.9701	growth arrest and DNA-damage-inducible,	2.6
80	444156	AW500059	Hs.85437	ESTs, Highly similar to AF219140 1 gastr	2.6
	428209	AA424197	Hs.98947	ESTs, Weakly similar to S33496 trypsin I	2.6
	437640	AA764893	Hs.272155	ESTs, Weakly similar to I38022 hypothe	2.6
	453948	AI970797	Hs.64859	ESTs	2.6
	415402	AA164687	Hs.177576	mannosyl (alpha-1,3-)-glycoprotein beta-	2.6



	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kD)	2.6
	418228	AA962181	Hs.111219	ESTs, Moderately similar to ALU1_HUMAN A	2.6
	401324				2.6
5	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypotheti	2.6
	443210	A1692649	Hs.9451	hypothetical protein MGC13168	2.6
	457244	AA581385	Hs.162473	ESTs, Weakly similar to I38022 hypotheti	2.6
	417144	AA362104	Hs.81337	lectin, galactoside-binding, soluble, 9	2.6
	433933	A1754389	Hs.133494	Homo sapiens clone TCCCA00164 mRNA sequ	2.6
10	437437	AA226869	Hs.16520	hypothetical protein DKFZp762L0311	2.6
	434206	AW136973	Hs.288516	ESTs, Weakly similar to S69890 mitogen I	2.6
	400992				2.6
	455530	AW984744		gb:RC1-HN0015-040400-011-c03 HN0015 Homo	2.6
	436139	AA765786	Hs.120936	ESTs	2.6
15	448330	AL036449	Hs.207163	ESTs	2.6
	412942	AL120344	Hs.75074	mitogen-activated protein kinase-activat	2.6
	432753	NM_014075	Hs.336938	Homo sapiens PRO0593 mRNA, complete cds	2.6
	434340	A1863735	Hs.186755	ESTs	2.6
	436693	AW973223	Hs.303197	B-cell CLL/lymphoma 7C	2.6
20	429482	AF076974	Hs.203952	transformation/transcription domain-asso	2.6
	432715	AA247152	Hs.200483	ESTs, Weakly similar to KIAA1074 protein	2.6
	414217	A1309298	Hs.279898	Homo sapiens cDNA: FLJ23155 fis, clone L	2.6
	434165	AA971328	Hs.95361	myosin VIIA (Usher syndrome 1B (autosoma	2.6
	414835	AA156720	Hs.185342	ESTs	2.6
25	424489	T48851	Hs.149250	D-siegle precursor,	2.6
	436496	AA281959	Hs.5210	glia maturation factor, gamma	2.6
	403797				2.6
	434573	AW372340	Hs.159717	ESTs	2.6
	418841	NM_002332	Hs.89137	low density lipoprotein-related protein	2.6
30	415785	R82419	Hs.23603	ESTs, Moderately similar to ALU8_HUMAN A	2.6
	450608	AA010365	Hs.193229	ESTs	2.6
	425304	AA463844	Hs.31339	fibroblast growth factor 11	2.6
	432268	BE311856	Hs.274230	3'-phosphoadenosine 5'-phosphosulfate sy	2.6
	410507	AA355288	Hs.40834	transitional epithelia response protein	2.6
35	427343	A1880044	Hs.176977	protein kinase C binding protein 2	2.6
	420917	AW135716	Hs.117330	ESTs	2.6
	414399	L47345	Hs.155202	transcription elongation factor B (SIII)	2.6
	446089	A1860021	Hs.270651	ESTs, Moderately similar to A47582 B-cel	2.6
	408029	AF136407	Hs.7446	chromosome 6 open reading frame 5	2.6
40	408475	AA315514	Hs.47986	hypothetical protein MGC10940	2.6
	450946	AA374569	Hs.127698	ESTs, Moderately similar to 2109260A B c	2.6
	421462	AF016495	Hs.104624	aquaporin 9	2.6
	434846	AW295389	Hs.119768	ESTs	2.6
	422887	A1751848	Hs.49215	ESTs	2.6
45	417435	NM_005181	Hs.82129	carbonic anhydrase III, muscle specific	2.6
	437389	AL359587	Hs.271586	hypothetical protein DKFZp762M115	2.5
	408981	AW500797	Hs.49427	Gem-interacting protein	2.5
	432180	Y18418	Hs.272822	RuvB (E coli homolog)-like 1	2.5
	416079	R40058	Hs.6911	ESTs	2.5
50	437820	AA769082	Hs.323836	ESTs, Weakly similar to alternatively sp	2.5
	439685	AW956781	Hs.293937	ESTs, Weakly similar to FXD2_HUMAN FORKH	2.5
	425681	AB018297	Hs.159183	KIAA0754 protein	2.5
	435177	A1018174	Hs.42936	ESTs	2.5
	437323	AA371145	Hs.226627	leptin receptor	2.5
55	422114	AW194851	Hs.111801	arsenato resistance protein ARS2	2.5
	448478	A1523218	Hs.203456	ESTs	2.5
	426623	AA392826	Hs.132793	ESTs	2.5
	448764	A1568607	Hs.182112	ESTs	2.5
	458385	A1051489	Hs.246214	ESTs	2.5
60	403726	N28939	Hs.13434	Homo sapiens clone 24418 mRNA sequence	2.5
	444888	A1651039	Hs.148559	ESTs	2.5
	456179	H75490	Hs.271930	ESTs	2.5
	424840	D79987	Hs.153479	extra spindle poles, S. cerevisiae, homo	2.5
	406273	NM_000919	Hs.83920	peptidylglycine alpha-amidating monooxyg	2.5
65	418054	NM_002318	Hs.83354	lysyl oxidase-like 2	2.5
	445936	BE543594	Hs.61478	hypothetical protein FLJ22329	2.5
	454967	AW848276		gb:IL3-CT0214-150200-074-E06 CT0214 Homo	2.5
	442303	AA989289	Hs.129169	ESTs	2.5
	456583	AF179897	Hs.104105	Meis (mouse) homolog 2	2.5
70	434263	N34895	Hs.44648	ESTs	2.5
	416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	2.5
	424528	AW073971	Hs.238954	ESTs, Weakly similar to KIAA1204 protein	2.5
	406038	Y14443	Hs.88219	zinc finger protein 200	2.5
	413495	Y12395	Hs.315177	interferon-related developmental regulat	2.5
75	423098	AA321980	Hs.204682	ESTs	2.5
	410817	A1262789	Hs.93659	protein disulfide isomerase related prot	2.5
	439841	AF038961	Hs.6710	mannose-6-phosphate utilization defect 1	2.5
	453828	AW970960	Hs.293821	ESTs	2.5
	445034	AW293376	Hs.143659	ESTs	2.5
80	449620	BE407797	Hs.23794	checkpoint with forkhead and ring finger	2.5
	406876	A1382286	Hs.180842	ribosomal protein L13	2.5
	412370	AW846614		gb:RC2-ET0021-280400-011-c05 ET0021 Homo	2.5
	423642	AW452650	Hs.157148	hypothetical protein MGC13204	2.5
	430357	AW976789	Hs.165607	ESTs	2.5

5	414853	U31116	Hs.77501	sarcoglycan, beta (43kD dystrophin-assoc	2.5
	416097	BE387371	Hs.118964	hypothetical protein FLJ20085	2.5
	428619	AK002140	Hs.187378	hypothetical protein FLJ11278	2.5
	413976	BE295452	Hs.75655	procollagen-proline, 2-oxoglutarate 4-di	2.5
	445223	AW291553	Hs.254983	ESTs	2.5
10	423925	X03833	Hs.1722	interleukin 1, alpha	2.5
	410165	BE560228	Hs.71869	apoptosis-associated speck-like protein	2.5
	406474				2.5
	433808	AW298141	Hs.157975	ESTs	2.5
	439755	AW748482	Hs.77873	B7 homolog 3	2.5
15	437528	N59846	Hs.159745	crumbs (Drosophila) homolog 1	2.5
	420734	AW972872	Hs.293736	ESTs	2.5
	415346	Z43108		gb:HSC13E071 normalized infant brain cDN	2.5
	419337	AW291112	Hs.209978	ESTs	2.5
	444606	R09478	Hs.18041	ESTs	2.5
20	430061	AB037817	Hs.230188	KIAA1396 protein	2.5
	413407	AI356293	Hs.75339	inositol polyphosphate phosphatase-like	2.5
	411955	BE467339	Hs.280115	ESTs	2.5
	409278	AA346683	Hs.52763	anaphase-promoting complex subunit 7	2.5
	403142				2.5
25	401714				2.5
	425081	X74794	Hs.154443	minichromosome maintenance deficient (S.	2.5
	416505	H66470	Hs.16004	ESTs	2.5
	431518	AA743462	Hs.165337	ESTs	2.5
	448623	BE513468	Hs.107515	ESTs, Weakly similar to T00329 hypotheti	2.5
30	428301	AW628666	Hs.98440	ESTs, Weakly similar to I38022 hypotheti	2.5
	404366				2.5
	449733	R74546	Hs.29438	Homo sapiens cDNA FLJ12094 fls, clone HE	2.5
	459583	AI907673		gb:IL-BT152-080399-004 BT152 Homo sapien	2.5
	402856	AW939659		gb:RCO-DT0076-110100-031-c09 DT0076 Homo	2.5
35	420751	J03019	Hs.99913	adrenergic, beta-1-, receptor	2.4
	436805	AA731533	Hs.270751	ESTs	2.4
	420285	AA258124	Hs.293878	ESTs, Moderately similar to ZN91_HUMAN Z	2.4
	453496	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	2.4
	453653	AL040600	Hs.188083	ESTs	2.4
40	407909	AW103986		gb:xd63e06.x1 NCI_CGAP_Ov23 Homo sapiens	2.4
	454630	BE142075		gb:CM3-HT0137-170999-012-f02 HT0137 Homo	2.4
	451026	AA013218	Hs.157492	cer-d4 (mouse) homolog	2.4
	420779	L12398	Hs.99922	dopamine receptor D4	2.4
	438322	AA804170	Hs.221349	ESTs	2.4
45	455908	BE158306		gb:QV0-HT0367-150200-114-h04 HT0367 Homo	2.4
	419625	U91616	Hs.91640	nuclear factor of kappa light polypeptid	2.4
	440773	AA352702	Hs.332541	Homo sapiens, Similar to RIKEN cDNA 2700	2.4
	450823	T81223	Hs.22011	complement-c1q tumor necrosis factor-rel	2.4
	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13090 fls, clone NT	2.4
50	429109	AL008637	Hs.196352	neutrophil cytosolic factor 4 (40kD)	2.4
	451802	AJ817711	Hs.209374	ESTs	2.4
	419417	R92491	Hs.39429	ESTs	2.4
	407094	AF000574	Hs.22405	leukocyte immunoglobulin-like receptor,	2.4
	423567	BE252949	Hs.69331	hypothetical protein FLJ13633	2.4
55	427501	AI369280	Hs.131743	ESTs	2.4
	451773	Z42044	Hs.26996	KIAA1278 protein	2.4
	436845	AA732297	Hs.113928	ESTs	2.4
	431584	AW296121	Hs.266263	Homo sapiens cDNA FLJ14115 fls, clone MA	2.4
	440614	AA781530	Hs.127236	hypothetical protein FLJ12879	2.4
60	423721	AF176911	Hs.132004	cardiotrophin-like cytokine; neurotroph	2.4
	452125	BE312642	Hs.28077	GDP-mannose pyrophosphorylase B	2.4
	419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C (CFTR	2.4
	453446	BE295996		gb:600944574F1 NIH_MGC_17 Homo sapiens c	2.4
	419792	AA250890	Hs.190037	ESTs	2.4
65	452786	R61362	Hs.106642	ESTs, Weakly similar to T09052 hypotheti	2.4
	410447	AW816134		gb:MR3-ST0220-290100-016-e04 ST0220 Homo	2.4
	438662	AA223599	Hs.6351	cleavage and polyadenylation specific fa	2.4
	402408				2.4
	443950	NM_001425	Hs.9999	epithelial membrane protein 3	2.4
70	414625	AA335738	Hs.76686	glutathione peroxidase 1	2.4
	403048				2.4
	432088	AA525454		gb:mi85c09.s1 NCI_CGAP_Pr20 Homo sapiens	2.4
	431692	AL021331	Hs.267749	unc93 (C.elegans) homolog A	2.4
	455023	AW850907		gb:IL3-CT0220-310100-065-H11 CT0220 Homo	2.4
75	426249	F05422	Hs.168352	nucleoporin-like protein 1	2.4
	446795	AI797713	Hs.156471	ESTs	2.4
	414774	X02419	Hs.77274	plasminogen activator, urokinase	2.4
	414252	AA346483	Hs.126191	ESTs	2.4
	417918	AA209205	Hs.163754	hypothetical protein FLJ12606	2.4
80	427550	BE242818	Hs.179606	nuclear RNA helicase, DECD variant of DE	2.4
	404020				2.4
	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	2.4
	417222	AJ525424	Hs.42053	hypothetical protein MGC2383	2.4
	443639	BE269042	Hs.9661	proteasome (prosome, macropain) subunit,	2.4
	452706	AW449390	Hs.257150	ESTs, Moderately similar to SUR1_HUMAN S	2.4
	401676				2.4
	428882	AA436915	Hs.131748	ESTs, Moderately similar to ALU7_HUMAN A	2.4

	436277	R88520	Hs.120917	ESTs	2.4
	426271	AF026547	Hs.169047	chondroitin sulfate proteoglycan 3 (neur	2.4
	405353				2.4
5	409193	AA131483		gb:zo08e05.r1 Stratagene neuroepithelium	2.4
	431431	AL096711	Hs.252953	Human DNA sequence from clone RP3-403A15	2.4
	407889	R34556	Hs.30800	ESTs, Weakly similar to S65657 alpha-1C-	2.4
	453335	AW857376	Hs.169238	fucosyltransferase 3 (galactoside 3(4)-L	2.4
	490621	AW297288	Hs.55918	hypothetical protein FLJ11354	2.4
10	419652	AL157485	Hs.91973	hypothetical protein	2.4
	421151	BE174431	Hs.63386	ESTs	2.4
	437846	AA773856	Hs.244569	esophagus cancer-related gene-2	2.4
	420681	AA847602	Hs.106510	ESTs, Moderately similar to ALU2_HUMAN A	2.4
	405288				2.4
15	453527	R49570	Hs.180236	ESTs	2.4
	429875	AI091815		gb:qa58b06.s1 Soares_NhHMPu_S1 Homo sapi	2.4
	436360	AI962796	Hs.136754	ESTs	2.4
	416592	X99226	Hs.284153	Fanconi anemia, complementation group A	2.4
	419991	AJ000098	Hs.94210	eyes absent (Drosophila) homolog 1	2.4
20	449539	W80363	Hs.58446	ESTs	2.4
	419870	AW403911	Hs.266175	phosphoprotein associated with GEMs	2.4
	404584				2.4
	454276	AW294996	Hs.255374	ESTs	2.4
	423746	AW361817	Hs.132370	NADPH oxidase 1	2.4
25	415558	AA885143	Hs.125719	ESTs	2.4
	428141	D50402	Hs.182611	solute carrier family 11 (proton-coupled	2.4
	406953	L36847		gb:Human (clone p17/90) rearranged iduro	2.4
	444471	AB020684	Hs.11217	KIAA0877 protein	2.4
	451031	AI360187	Hs.4254	ESTs	2.4
30	455302	AW997641		gb:RC6-BN0052-170200-011-D06 BN0052 Homo	2.4
	449063	AI627352	Hs.235547	Homo sapiens, clone IMAGE:2905978, mRNA,	2.4
	401048				2.4
	434420	AA688278	Hs.194864	hypothetical protein FLJ22578	2.4
	425848	BE242709	Hs.159637	valyl-tRNA synthetase 2	2.4
35	449086	AI628357	Hs.208037	ESTs	2.4
	415238	R37780	Hs.21422	ESTs	2.4
	448337	AW206453	Hs.3782	ESTs	2.4
	416991	N38389	Hs.141296	KIAA0226 gene product	2.3
	412600	L28924	Hs.74101	spleen tyrosine kinase	2.3
40	418385	AW590613	Hs.301040	Homo sapiens, clone IMAGE:3357127, mRNA,	2.3
	440769	BE561793	Hs.21446	KIAA1716 protein	2.3
	450437	X13956	Hs.24998	hypothetical protein MGC10471	2.3
	412035	N78559	Hs.293629	hypothetical protein MGC3121	2.3
	406739	AI566709	Hs.182426	ribosomal protein S2	2.3
45	418506	AA084248	Hs.85339	G protein-coupled receptor 39	2.3
	410286	AI739159	Hs.61898	DKFZP586N2124 protein	2.3
	443740	R56434	Hs.21062	ESTs	2.3
	405605				2.3
	416913	AW934714		gb:RC1-DT0001-031299-011-a11 DT0001 Homo	2.3
50	426509	M31166	Hs.2050	pentaxin-related gene, rapidly induced b	2.3
	445828	F05802	Hs.81907	ESTs	2.3
	457195	AB011099	Hs.196647	KIAA0527 protein	2.3
	420372	AW960049	Hs.293660	Homo sapiens, clone IMAGE:3535478, mRNA,	2.3
	423198	M81933	Hs.1634	cell division cycle 25A	2.3
55	457730	AW753613		gb:RC1-CT0268-060100-013-e01 CT0268 Homo	2.3
	412014	AI620650	Hs.43761	ESTs, Weakly similar to A46010 X-linked	2.3
	447131	NM_004585	Hs.17466	retinoic acid receptor responder (tazaro	2.3
	446288	AW189209	Hs.149708	ESTs	2.3
	436954	AA740151	Hs.130425	ESTs	2.3
60	411658	AW855598		gb:CM1-CT0278-031199-032-e08 CT0278 Homo	2.3
	404240				2.3
	456094	H95091		gb:yw57a09.r1 Soares_ptacenta_8to9weeks_	2.3
	416951	AA190926	Hs.190785	ESTs, Moderately similar to S65657 alpha	2.3
	406737	AI356586		gb:qy15h09.x1 NCL_CGAP_Bm23 Homo sapien	2.3
65	458453	AI097452	Hs.135096	ESTs	2.3
	452330	AI879127	Hs.191979	KIAA1733 protein	2.3
	408523	AW833259	Hs.314287	ESTs	2.3
	455470	AW947992		gb:PMO-MT0011-240300-001-c09 MT0011 Homo	2.3
	436323	R17697	Hs.140963	ESTs, Weakly similar to I38022 hypotheti	2.3
70	450000	AI952797	Hs.10888	hypothetical protein FLJ21709	2.3
	416171	H23896	Hs.125790	leucine-rich repeat-containing 2	2.3
	419134	T89863	Hs.221771	ESTs	2.3
	445933	AV655733	Hs.293860	spintster-like protein	2.3
	422089	AA523172	Hs.103135	ESTs, Weakly similar to SFR4_HUMAN SPLIC	2.3
75	449911	AI262106	Hs.12653	ESTs	2.3
	417079	U65590	Hs.81134	interleukin 1 receptor antagonist	2.3
	411742	AW247593	Hs.71819	eukaryotic translation initiation factor	2.3
	435615	Y15065	Hs.4975	potassium voltage-gated channel, KQT-4k	2.3
	423491	AA191765	Hs.129673	eukaryotic translation initiation factor	2.3
80	407182	AA312551	Hs.230157	ESTs	2.3
	411448	AA178955	Hs.271439	ESTs, Weakly similar to I38022 hypotheti	2.3
	438644	AI126162	Hs.129037	ESTs	2.3
	432691	U29725	Hs.3080	mitogen-activated protein kinase 7	2.3
	452198	AI097560	Hs.61210	ESTs, Weakly similar to I38022 hypotheti	2.3

	411125	AA151647	Hs.68877	cytochrome b-245, alpha polypeptide	2.3
	404054				2.3
	430458	AA479300	Hs.225706	ESTs, Weakly similar to I38022 hypothetical	2.3
	440210	AW874562	Hs.125296	ESTs	2.3
5	446727	AB011095	Hs.16032	KIAA0523 protein	2.3
	453775	NM_002916	Hs.35120	replication factor C (activator 1) 4 (37	2.3
	438379	N23018	Hs.171391	C-terminal binding protein 2	2.3
	449919	AI674685	Hs.200141	ESTs	2.3
	415293	R49462	Hs.106541	ESTs	2.3
10	441126	NM_000429	Hs.323715	methionine adenosyltransferase I, alpha	2.3
	408203	AA053137	Hs.42390	nasopharyngeal carcinoma susceptibility	2.3
	434941	AW073202	Hs.334825	Homo sapiens cDNA FLJ14752 fis, clone NT	2.3
	450748	AI733093	Hs.130016	ESTs	2.3
	404185				2.3
15	418327	U70370	Hs.84138	paired-like homeodomain transcription fa	2.3
	451370	AI791929	Hs.300782	ESTs	2.3
	400034				2.3
	407723	AW071161	Hs.252873	ESTs	2.3
	431320	AW969474	Hs.183070	ESTs	2.3
20	429271	AF039850	Hs.198515	dead ringer (Drosophila)-like 1	2.3
	453707	AW003879	Hs.126522	Homo sapiens, clone MGC:16722, mRNA, com	2.3
	419225	U70073		gb:HSU70073 Human Homo sapiens cDNA clon	2.3
	444656	AI277924	Hs.145199	ESTs	2.3
	405741				2.3
25	400917				2.3
	432567	AA736777	Hs.293770	ESTs	2.3
	437949	U78519	Hs.41654	ESTs, Weakly similar to A46010 X-linked	2.3
	450514	AC005785	Hs.25059	A kinase (PRKA) anchor protein 8	2.3
	418400	BE243026	Hs.301989	KIAA0246 protein	2.3
30	444019	BE173977	Hs.10098	putative nucleolar RNA helicase	2.3
	406326				2.3
	412077	NS1107	Hs.47199	ESTs, Weakly similar to FLJ00004 protein	2.3
	427647	W19744	Hs.180059	Homo sapiens cDNA FLJ20653 fis, clone KA	2.3
	414528	AA148950	Hs.188836	ESTs	2.3
35	414854	BE546797	Hs.51483	ESTs, Weakly similar to hypothetical pro	2.3
	420352	BE258835		gb:601117374F1 NIH_MGC_16 Homo sapiens c	2.3
	439467	AW292275	Hs.158365	ESTs	2.3
	402627				2.3
40	451711	AK000461	Hs.26890	cat eye syndrome chromosome region, cand	2.3
	424308	AW975531	Hs.154443	minichromosome maintenance deficient (S.	2.3
	423669	BE409301	Hs.134012	C1q-related factor	2.3
	405915				2.3
	431503	NM_012129	Hs.258576	claudin 12	2.3
	423306	W88562	Hs.108198	ESTs	2.3
45	443232	AF161521	Hs.9081	phenylalanyl-tRNA synthetase beta-subuni	2.3
	433064	D79991	Hs.30002	SH3-containing protein SH3GLB2; KIAA1848	2.3
	434437	AI912566	Hs.187813	ESTs	2.3
	436191	BE407866	Hs.170253	hypothetical protein FLJ23282	2.3
	420006	H14429	Hs.94300	serologically defined colon cancer anti	2.3
50	447942	F12628	Hs.334786	hypothetical protein MGC16040	2.3
	403166				2.3
	422119	AI277829	Hs.111862	KIAA0590 gene product	2.3
	403751				2.3
55	426451	AI908165	Hs.169946	GATA-binding protein 3	2.3
	427413	BE547647	Hs.177781	hypothetical protein MGC5618	2.3
	409091	AW970386	Hs.269423	ESTs	2.3
	440491	R35252	Hs.24944	ESTs, Weakly similar to 2109260A B cell	2.3
	427722	AK000123	Hs.180479	hypothetical protein FLJ20116	2.3
	405747				2.3
60	438210	AA780519	Hs.311601	EST	2.3
	404652				2.3
	423524	AF055989	Hs.129738	potassium voltage-gated channel, Shaw-re	2.2
	426793	X89887	Hs.172350	HIR (histone cell cycle regulation defec	2.2
65	444424	AI654684	Hs.196377	ESTs	2.2
	434031	BE384165	Hs.23723	pseudouridylylase synthase 1	2.2
	427650	AW501245	Hs.252259	ribosomal protein S3	2.2
	435220	D50030	Hs.104	HGF activator	2.2
	438279	AA805166	Hs.154762	HIV-1 rev binding protein 2	2.2
	424668	D83702	Hs.151573	cryptochrome 1 (photolyase-like)	2.2
70	429961	BE246829	Hs.226770	OKFZP566C0424 protein	2.2
	442065	AI831229	Hs.128417	hypothetical protein FLJ14009	2.2
	415198	AW009480	Hs.943	natural killer cell transcript 4	2.2
	420536	AL117455	Hs.275438	histone deacetylase 7A	2.2
75	411263	BE297802	Hs.69360	kinesin-like 6 (mitotic centromere-assoc	2.2
	443753	AW367578	Hs.134749	ESTs	2.2
	423243	AA351938	Hs.23964	sin3-associated polypeptide, 18kD	2.2
	446572	AV659151	Hs.282961	ESTs	2.2
	412247	AF022375	Hs.73793	vascular endothelial growth factor	2.2
80	421040	AA715026	Hs.135280	ESTs	2.2
	426212	S71824	Hs.167988	neural cell adhesion molecule 1	2.2
	455584	BE007420		gb:PM3-BN0142-200300-001-c04 BN0142 Homo	2.2
	406851	AA609784	Hs.180255	major histocompatibility complex, class	2.2
	444153	AK001610	Hs.10414	hypothetical protein FLJ10748	2.2

	419575	U43431	Hs.91175	topoisomerase (DNA) III alpha	2.2
	418672	L44284	Hs.159743	ESTs	2.2
	456261	AA210718	Hs.104157	ESTs, Weakly similar to KIAA0694 protein	2.2
	415737	AA167626	Hs.118743	ESTs	2.2
5	447554	AI391588	Hs.38119	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.2
	405159				2.2
	442177	AW661820	Hs.211413	ESTs	2.2
	446139	H77395	Hs.39749	ESTs	2.2
10	458339	AW976853	Hs.172843	ESTs	2.2
	401876				2.2
	439566	AF086387		gb:Homo sapiens full length insert cDNA	2.2
	425079	H09963	Hs.2257	vitronectin (serum spreading factor, som	2.2
	441837	AA361743	Hs.179881	core-binding factor, beta subunit	2.2
15	430644	AB015419	Hs.247710	preprotrypsin-releasing peptide	2.2
	431474	AL133990	Hs.190642	ESTs	2.2
	407739	NM_002285	Hs.38070	lymphoid nuclear protein related to AF4	2.2
	424244	AV647184	Hs.143601	hypothetical protein hCLA-Iso	2.2
	438057	AW294544	Hs.125785	ESTs, Weakly similar to CORB MOUSE CORN1	2.2
	412715	NM_000947	Hs.74519	primase, polypeptide 2A (58kD)	2.2
20	422385	AF035537	Hs.115521	REV3 (yeast homolog)-like, catalytic sub	2.2
	404170				2.2
	406902	M32074		gb:Human retinoic acid receptor gamma 2	2.2
	437902	AA770599	Hs.144055	ESTs	2.2
	401012				2.2
25	446502	AI302654	Hs.208024	ESTs	2.2
	442554	AW467376	Hs.129640	ESTs	2.2
	443021	AA368546	Hs.8904	Ig superfamily protein	2.2
	421141	AW117261	Hs.125914	ESTs	2.2
	443070	BE388662	Hs.8984	Homo sapiens chromosome 14 BAC 98L12	2.2
30	446566	HS5741	Hs.17914	membrane-spanning 4-domains, subfamily A	2.2
	427695	R88483	Hs.172662	ESTs	2.2
	426503	AA380153		gb:EST93093 Skin tumor I Homo sapiens cD	2.2
	431468	AW248431	Hs.256526	nuclear prelamin A recognition factor	2.2
35	416185	AW975861	Hs.47367	KIAA1785 protein	2.2
	437319	BE410958	Hs.56406	Homo sapiens cDNA FLJ13549 fs, clone PL	2.2
	402064				2.2
	413335	AI613318	Hs.48442	ESTs	2.2
	408212	AA297567	Hs.43728	hypothetical protein	2.2
	406169				2.2
40	451099	RS2795	Hs.25954	interleukin 13 receptor, alpha 2	2.2
	407335	AA631047	Hs.158761	Homo sapiens cDNA FLJ13054 fs, clone NT	2.2
	409715	W42591	Hs.23892	ESTs	2.2
	431921	N48466	Hs.58879	ESTs	2.2
45	443823	BE089782	Hs.9877	hypothetical protein	2.2
	432458	AI968598	Hs.78768	malignant cell expression-enhanced gene/	2.2
	419726	U50330	Hs.1274	bone morphogenetic protein 1	2.2
	423178	AI033140	Hs.124983	Homo sapiens mRNA: cDNA DKFZp554C142 (fr	2.2
	451089	AA903705	Hs.4190	Homo sapiens cDNA: FLJ23269 fs, clone C	2.2
50	415216	AI825905	Hs.193211	Homo sapiens cDNA: FLJ11421 fs, clone HE	2.2
	442242	AV647908	Hs.90424	Homo sapiens cDNA: FLJ23285 fs, clone H	2.2
	441830	AA383104	Hs.42954	hypothetical protein DKFZp554D0372	2.2
	406660	X65371	Hs.172550	polypyrimidine tract binding protein (he	2.2
	443378	AW392550	Hs.9280	proteasome (prosome, macropain) subunit,	2.2
55	432558	R97268	Hs.177269	ESTs	2.2
	408146	R45621	Hs.81057	hypothetical protein MGC2718	2.2
	419885	NM_007020	Hs.93502	U1-snRNP binding protein homolog (70kD)	2.2
	439444	AI277652	Hs.54578	ESTs, Weakly similar to I38022 hypotheti	2.2
	438407	AA57122	Hs.129673	eukaryotic translation initiation factor	2.2
60	450184	W31096	Hs.237617	Homo sapiens, clone IMAGE:3447394, mRNA,	2.2
	409130	BE076601	Hs.75658	phosphorylase, glycogen; brain	2.2
	426844	AW972635	Hs.301904	hypothetical protein FLJ12671	2.2
	429489	AF008203	Hs.204039	aristalless-like homeobox 3	2.2
	433042	AW193534	Hs.281895	Homo sapiens cDNA FLJ11660 fs, clone HE	2.2
65	440658	H29142	Hs.143032	ESTs, Weakly similar to neuronal thread	2.2
	408204	AA454501	Hs.43666	protein tyrosine phosphatase type IVA, m	2.2
	427498	NM_003926	Hs.178728	methy-CpG binding domain protein 3	2.2
	408006	H57654	Hs.303345	ESTs, Weakly similar to I38022 hypotheti	2.2
	445703	AV654845	Hs.27	glycine dehydrogenase (decarboxylating;	2.2
70	431446	AW294929	Hs.255369	Homo sapiens cDNA FLJ10265 fs, clone HE	2.2
	456660	AA909249	Hs.112282	solute carrier family 30 (zinc transport	2.2
	433099	NM_002504	Hs.3187	nuclear transcription factor, X-box bind	2.2
	415857	AA868115	Hs.127797	Homo sapiens cDNA FLJ11381 fs, clone HE	2.2
	415245	N59650	Hs.27252	ESTs	2.2
75	443657	R14973		gb:yl42110.s1 Soares fetal liver spleen	2.2
	402521	AW501216	Hs.108945	KIAA0515 protein	2.2
	414819	BE177320	Hs.156148	hypothetical protein FLJ13231	2.2
	446530	AV658909	Hs.282642	ESTs	2.2
	415797	AI291896	Hs.72800	ESTs	2.2
80	414812	X72755	Hs.77367	monokine induced by gamma interferon	2.2
	453028	AB006532	Hs.31442	RecQ protein-like 4	2.2
	412133	U83460	Hs.73614	solute carrier family 31 (copper transpo	2.2
	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfat	2.2
	437033	AW248364	Hs.5409	RNA polymerase I subunit	2.2

5	422732	AA577455	Hs.24937	transformer-2 alpha (tra-2 alpha)	2.2
	416388	AI417358	Hs.73677	ESTs	2.2
	452849	AF044924	Hs.30792	hook2 protein	2.2
	446615	BE513202	Hs.15589	PPAR binding protein	2.2
	428351	NM_015905	Hs.183858	transcriptional intermediary factor 1	2.2
10	446279	AA490770	Hs.182382	ESTs	2.2
	422938	NM_001809	Hs.1594	centromere protein A (17kD)	2.2
	403969				2.2
	410423	AW402432	Hs.63489	protein tyrosine phosphatase, non-recept	2.2
	429738	AF125304	Hs.212680	tumor necrosis factor receptor superfam	2.2
15	447091	AW089648	Hs.157779	ESTs, Weakly similar to CA17_HUMAN COLLA	2.2
	422017	NM_003877	Hs.110776	STAT induced STAT inhibitor-2	2.2
	428728	NM_007118	Hs.171957	triple functional domain (PTPRF interact	2.2
	438726	AB033103	Hs.6385	KAA1277 protein	2.2
	453315	BE544203	Hs.24831	ESTs	2.2
20	423244	AL039379	Hs.209602	ESTs, Weakly similar to ubiquitous TPR m	2.2
	433610	AA806822	Hs.112547	ESTs	2.2
	429451	BE409861	Hs.202833	heme oxygenase (decycling) 1	2.2
	417980	R32235		gb:yh6708.1 Soares placenta Nb2HP Homo	2.2
	406347				2.2
25	414406	BE297904		gb:601177814F1 NIH_MGC_17 Homo sapiens c	2.2
	401827				2.2
	446913	AA430650	Hs.16529	transmembrane 4 superfamily member (tet	2.2
	452294	AI871925	Hs.117895	ESTs, Moderately similar to A47582 B-cel	2.2
	404084				2.2
30	458786	AK002084	Hs.132851	hypothetical protein FLJ11222	2.2
	435031	AB32091	Hs.116877	ESTs	2.2
	442609	AL020998	Hs.8518	seleoprotein N	2.1
	439732	AW628604	Hs.167641	hypothetical protein from EUROIMAGE 1703	2.1
	421506	BE302796	Hs.105097	thymidine kinase 1, soluble	2.1
35	439253	AF085064	Hs.332252	ESTs	2.1
	409669	AW177551	Hs.220255	hypothetical protein MGC13098	2.1
	429574	BE268321	Hs.208912	hypothetical protein MGC861	2.1
	437470	AL390147	Hs.134742	hypothetical protein DKFZp547D065	2.1
	408945	AW015089	Hs.4964	DKFZP586J1624 protein	2.1
40	447687	AI627947	Hs.150186	hypothetical protein DKFZp566K1946	2.1
	459584	AI910884	Hs.207898	ESTs	2.1
	439130	AA306090	Hs.124707	ESTs	2.1
	428180	AI129767	Hs.182874	guanine nucleotide binding protein (G pr	2.1
	442028	AI239437	Hs.48945	ESTs	2.1
45	430968	AW972830		gb:EST384925 MAGE resequences, MAGL Homo	2.1
	443609	AV650231	Hs.282941	ESTs, Highly similar to A Chain A, Human	2.1
	417184	AA338283	Hs.81361	heterogeneous nuclear ribonucleoprotein	2.1
	444534	AW271626	Hs.42294	ESTs	2.1
	438391	AI262248	Hs.25027	ESTs	2.1
50	442003	AW297497	Hs.201891	ESTs	2.1
	456278	BE300369	Hs.289038	hypothetical protein MGC4126	2.1
	416976	BE243985	Hs.80680	major vault protein	2.1
	417810	D28419	Hs.82609	hydroxymethylbilane synthase	2.1
	445242	BE156478	Hs.21108	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.1
55	452712	AW838616		gb:RC5-LT0054-140200-013-D01 LT0064 Homo	2.1
	434926	BE543269	Hs.50252	mitochondrial ribosomal protein L32	2.1
	421564	AB007864	Hs.105850	KIAA0404 protein	2.1
	424927	AW973666	Hs.153850	hypothetical protein C32102.4	2.1
	432742	AA564453	Hs.162339	ESTs	2.1
60	435958	H98180	Hs.117975	ESTs	2.1
	421531	AA713505	Hs.291769	ESTs	2.1
	410431	BE261320	Hs.158196	transcriptional adaptor 3 (ADA3, yeast h	2.1
	429503	AI570943	Hs.337546	ESTs	2.1
	448127	AI478416	Hs.282883	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.1
65	452897	BE066058	Hs.269233	ESTs, Moderately similar to I78885 serin	2.1
	447112	H17800	Hs.7154	ESTs	2.1
	406577				2.1
	437162	AW005505	Hs.5484	thyroid hormone receptor coactivating pr	2.1
	451460	AI797550	Hs.209652	ESTs	2.1
70	447402	H54520	Hs.18490	hypothetical protein FLJ20452	2.1
	435828	AA700705	Hs.13852	ESTs	2.1
	436396	AI683487	Hs.152213	wingless-type MMTV integration site faml	2.1
	420582	BE047878	Hs.99093	Homo sapiens chromosome 19, cosmid R2837	2.1
	452020	AA722012	Hs.255757	ESTs, Weakly similar to AT2A_HUMAN POTEN	2.1
75	415586	Z45481		gb:HSC2QE041 normalized Infant brain cDN	2.1
	452620	AA436504	Hs.119286	ESTs	2.1
	457066	BE244613	Hs.158272	ESTs, Weakly similar to CA13 MOUSE COLLA	2.1
	435472	AW972330	Hs.283022	triggering receptor expressed on myeloid	2.1
	431741	AA514783	Hs.191701	ESTs	2.1
80	446840	AW294828	Hs.209203	ESTs	2.1
	440818	AI147060	Hs.146726	ESTs	2.1
	410174	AA306007	Hs.59461	DKFZP434C245 protein	2.1
	400822				2.1
	412760	AW379030	Hs.41324	ESTs	2.1
	410653	BE383768	Hs.65238	95 kDa retinoblastoma protein binding pr	2.1
	426925	NM_001196	Hs.315689	Homo sapiens cDNA: FLJ22373 fs, clone H	2.1
	424242	AA337476	Hs.293984	hypothetical protein MGC13102	2.1

5	452560	BE077084	Hs.336432	ESTs	2.1
	456437	AI924228	Hs.115185	ESTs, Moderately similar to PC4259 ferr	2.1
	456922	BE501831	Hs.282053	ESTs	2.1
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	2.1
	419488	AA316241	Hs.90691	nucleophosmin/nucleoplasm 3	2.1
	411829	AW865749		gb:QV3-SN0021-100500-185-c03 SN0021 Homo	2.1
	457192	AL135682	Hs.22452	Homo sapiens mRNA for KIAA1737 protein,	2.1
	422128	AW881145		gb:QV0-OT0033-010400-182-a07 OT0033 Homo	2.1
10	452571	W31518	Hs.34665	ESTs	2.1
	423699	H41850	Hs.131846	PCAF associated factor 65 alpha	2.1
	406610				2.1
	453638	AW814996		gb:MR1-ST0206-170400-024-h09 ST0206 Homo	2.1
	418856	AA362858		gb:EST72900 Ovary II Homo sapiens cDNA 5	2.1
15	437623	D63880	Hs.5719	chromosome condensation-related SMC-asso	2.1
	410908	AA121686	Hs.10592	ESTs	2.1
	420221	N25991	Hs.43725	ESTs	2.1
	424739	AA346108	Hs.221610	ESTs	2.1
	425398	AL049689	Hs.156369	hypothetical protein similar to tenascin	2.1
20	424901	Z11933	Hs.182505	POU domain, class 3, transcription facto	2.1
	411096	U80034	Hs.68583	mitochondrial intermediate peptidase	2.1
	415635	F13168		gb:HSC3JF101 normalized infant brain cDN	2.1
	418181	U37012	Hs.83727	cleavage and polyadenylation specific fa	2.1
	407103	AA424881	Hs.256301	hypothetical protein MGC13170	2.1
25	454389	AW752571		gb:IL3-CT0213-170100-055-F02 CT0213 Homo	2.1
	400021				2.1
	439228	N51700		gb:yy72d01.s1 Soares_multiple_sclerosis_	2.1
	456505	AA504595	Hs.111418	ESTs	2.1
	405258				2.1
30	444645	AI184564	Hs.101654	ESTs	2.1
	430246	AI269069	Hs.109268	hypothetical protein FLJ12552	2.1
	458687	AW024815	Hs.170088	GLUT4 enhancer factor	2.1
	403857				2.1
	400258				2.1
35	422221	AA306649	Hs.169370	FYN oncogene related to SRC, FGR, YES	2.1
	441054	AA913591	Hs.126480	ESTs	2.1
	452700	AI859390	Hs.288940	five-span transmembrane protein M83	2.1
	454606	AW809752		gb:MR4-ST0124-181299-020-b06 ST0124 Homo	2.1
	448954	AB014564	Hs.22616	KIAA0664 protein	2.1
40	443148	AI034357	Hs.211194	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.1
	453486	AI039201	Hs.173554	ubiquinol-cytochrome c reductase core pr	2.1
	437695	AA769202	Hs.192142	ESTs	2.1
	425449	X52056	Hs.157441	spleen focus forming virus (SFFV) provir	2.1
	447270	AC002551	Hs.331	general transcription factor IIIC, polyp	2.1
45	435677	AA694142	Hs.293726	ESTs, Weakly similar to TSGA RAT TESTIS	2.1
	436382	AW977063	Hs.250181	ESTs	2.1
	435837	AI689210	Hs.187276	Homo sapiens cDNA FLJ11431 fs, clone HE	2.1
	458287	AA987556	Hs.12867	ESTs	2.1
	423794	BE551781	Hs.231895	ESTs	2.1
50	408049	AW076098	Hs.74316	desmoplakin (DPI, DPII)	2.1
	407721				2.1
	451999	AW176401	Hs.27424	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	2.1
	417541	AI992191	Hs.180040	hypothetical protein FLJ22439	2.1
	414857	AW402389	Hs.920	modulator recognition factor I	2.1
55	435760	AF231922	Hs.213004	chromosome 21 open reading frame 62	2.1
	428086	AL110193	Hs.224137	hypothetical protein	2.1
	447853	AI434204	Hs.164285	ESTs, Weakly similar to AFG1_YEAST AFG1	2.1
	419034	NM_002110	Hs.89555	hemopoietic cell kinase	2.1
	431019	NM_005249	Hs.2714	forkhead box G1B	2.1
60	421064	AI245432	Hs.101382	tumor necrosis factor, alpha-induced pro	2.1
	416435	AI431301	Hs.179703	KIAA0129 gene product	2.1
	437014	AA808757	Hs.222531	ESTs, Weakly similar to S59501 interfero	2.1
	459369	T83080		gb:yd40e03.r1 Soares fetal liver spleen	2.1
	402239				2.1
65	412280	AW205116	Hs.272814	hypothetical protein DKFZp434E1723	2.1
	426012	AA367507	Hs.75874	pregnancy-associated plasma protein A	2.1
	438865	AI866558	Hs.184987	ESTs	2.1
	426076	AW962714		gb:EST374787 MAGE resequences, MAGG Homo	2.1
	404561				2.1
70	442932	AA457211	Hs.8858	bromodomain adjacent to zinc finger doma	2.1
	408175	W29089	Hs.19066	hypothetical protein DKFZp667O2416	2.1
	423867	AA331886		gb:EST35757 Embryo, 8 week I Homo septen	2.1
	458604	W37944	Hs.4007	Sarcolemmal-associated protein	2.1
	409650	T08490	Hs.288969	HSCARG protein	2.1
	401729				2.1
75	433675	AW977653	Hs.75319	ribonucleotide reductase M2 polypeptide	2.1
	456741	W37608	Hs.184492	ESTs	2.1
	417037	BE083936	Hs.80976	antigen identified by monoclonal antibod	2.1
	415079	R43179	Hs.22895	hypothetical protein FLJ23548	2.1
80	439262	AA832333	Hs.333045	ESTs	2.1
	403108				2.1
	436718	AW015227	Hs.289053	hypothetical protein FLJ14733	2.1
	440696	AI762757	Hs.187660	putative Rab5 GDI/GTP exchange factor ho	2.1
	409745	AA077391		gb:7B14E12 Chromosome 7 Fetal Brain cDNA	2.1

5	453485	BE620712	Hs.33026	hypothetical protein PP2447	2.1
	418177	N44967	Hs.5663	ESTs	2.1
	457292	AI921270	Hs.334882	hypothetical protein FLJ14251	2.1
	454434	AA083558	Hs.261286	ESTs	2.1
10	406085				2.1
	424441	X14850	Hs.147097	H2A histone family, member X	2.1
	422726	U11690	Hs.1572	faciogenital dysplasia (Aarskog-Scott sy	2.1
	424576	BE154142	Hs.96833	ESTs	2.1
15	423660	AL045228	Hs.130831	Homo sapiens mRNA: cDNA DKFZp434L137 (tr	2.1
	403509	AF231919	Hs.18759	KIAA0539 gene product	2.1
	441940	AW298115	Hs.128152	ESTs	2.1
	439190	AW978693	Hs.293811	ESTs	2.1
20	417791	AW965339	Hs.111471	ESTs	2.1
	423701	AA329856	Hs.143022	ESTs	2.1
	427239	BE270447	Hs.174070	ubiquitin carrier protein	2.1
	459642	BE243103		gb:TCAP2E0949 Pediatric acute myelogeno	2.1
25	450385	AI631024	Hs.24948	synuclein, alpha interacting protein (sy	2.1
	425169	NM_004341	Hs.154868	carbamoyl-phosphate synthetase 2, aspart	2.1
	425591	AW294734	Hs.279727	Homo sapiens cDNA FLJ14035 fis, clone HE	2.1
	445101	T75202	Hs.12314	Homo sapiens mRNA: cDNA DKFZp586C1019 (f	2.1
30	412811	HO6382	Hs.21400	ESTs	2.1
	426369	AF134157	Hs.169487	Kreiser (mouse) mal-related leucine zip	2.1
	435924	AW029203	Hs.191952	ESTs	2.1
	418388	R72332	Hs.29258	Homo sapiens cDNA FLJ11364 fis, clone HE	2.1
35	452235	AL039743	Hs.28514	testes development-related NYD-SP21	2.1
	452313	Y00486	Hs.28914	adenine phosphoribosyltransferase	2.1
	450704	H85157	Hs.40696	ESTs	2.1
	427539	AA405205	Hs.97960	ESTs, Weakly similar to T51146 ring-box	2.1
40	402028				2.1
	405362				2.1
	414718	H95348	Hs.107987	ESTs	2.1
	433424	R68252	Hs.163566	ESTs	2.1
45	444875	AI200759	Hs.44737	ESTs	2.0
	449523	NM_000579	Hs.54443	chemokine (C-C motif) receptor 5	2.0
	456072	H54381		gb:yq89a03.s1 Soares fetal liver spleen	2.0
	436331	AI239495	Hs.120189	ESTs	2.0
50	448418	Z43704	Hs.21192	Homo sapiens clone 25155 mRNA sequence	2.0
	447250	AI878909	Hs.17883	protein phosphatase 1G (formerly 2C), ma	2.0
	448192	R43915	Hs.4958	ESTs	2.0
	448966	AW372914	Hs.85149	phosphoinositol 3-phosphate-binding prot	2.0
55	408605	AF025374	Hs.46465	T-cell, immune regulator 1	2.0
	410790	AW803357		gb:IL2-UM0079-090300-050-A08 UM0079 Homo	2.0
	436872	U15624		gb:Human H1 RNA	2.0
	432238	AL133057	Hs.274135	Homo sapiens mRNA: cDNA DKFZp434K1815 (f	2.0
60	446307	T50083	Hs.9094	ESTs	2.0
	436588	AA759233	Hs.126506	ESTs	2.0
	452487	AW207659	Hs.6630	Homo sapiens cDNA FLJ13329 fis, clone OV	2.0
	430420	AW140027	Hs.26373	Homo sapiens cDNA: FLJ23449 fis, clone H	2.0
65	432036	AF224266	Hs.272373	Interleukin 20	2.0
	414460	L00727	Hs.898	dystrophin myotonic-protein kinase	2.0
	433507	AI817338	Hs.191791	ESTs	2.0
	427964	AA418082	Hs.98286	ESTs, Weakly similar to T20655 hypotheti	2.0
70	443108	W86975	Hs.203707	ESTs	2.0
	434504	AI887341	Hs.121590	hypothetical protein FLJ12827	2.0
	454310	AW818390	Hs.175613	homolog of Xenopus Caspase	2.0
	443566	AI290284	Hs.159872	ESTs	2.0
75	449722	BE280074	Hs.23960	cyclin B1	2.0
	452682	AA456193	Hs.9071	progesterone membrane binding protein	2.0
	412362	AW945484	Hs.184252	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.0
	429341	X73874	Hs.2393	phosphorylase kinase, alpha 1 (muscle)	2.0
80	435863	AF255346	Hs.62919	Jun dimerization protein p21SNFT	2.0
	400774	R58624	Hs.2186	eukaryotic translation elongation factor	2.0
	453944	AW975369	Hs.292570	Homo sapiens, clone IMAGE:3502107, mRNA,	2.0
	419227	BE537383	Hs.89739	cholinergic receptor, nicotinic, beta po	2.0
85	448529	T26460	Hs.22550	ESTs	2.0
	443206	AB011420	Hs.9075	serine/threonine kinase 17a (apoptosis-1	2.0
	439360	AA448488	Hs.336629	ribosomal protein L44	2.0
	436660	AI658870	Hs.184513	ESTs	2.0
90	449030	AI365582	Hs.57100	Homo sapiens mRNA for FLJ00016 protein,	2.0
	411048	AK001742	Hs.67991	hypothetical protein DKFZp434G0522	2.0
	406624	AF052762		gb:Homo sapiens clone csneg8-1 immunoglo	2.0
	450666	T99968	Hs.18799	ESTs, Weakly similar to I38022 hypotheti	2.0
95	446143	BE245342	Hs.306079	sec61 homolog	2.0
	437698	R61837	Hs.7990	ESTs, Moderately similar to I84505 calci	2.0
	426607	AA382330	Hs.124223	ESTs	2.0
	449246	AW411209	Hs.23363	hypothetical protein FLJ10983	2.0
100	422564	AI148006	Hs.222120	ESTs	2.0
	432682	AI376400	Hs.159588	ESTs	2.0
	422140	BE295918	Hs.112193	mutS (E. coli) homolog 5	2.0
	408215	BE614290	Hs.43812	syntaxin 10	2.0
105	417129	AI381800	Hs.300684	calcitonin gene-related peptide-receptor	2.0
	442772	AW503680	Hs.5357	Homo sapiens clone 24416 mRNA sequence	2.0
	434928	AW015595	Hs.4267	Homo sapiens clones 24714 and 24715 mRNA	2.0



	411380	AW841619		gb:RC1-CN0017-120200-012-b09 CN0017 Homo	2.0
	430603	AA148164	Hs.247280	HBV associated factor	2.0
	425905	AB032959	Hs.318584	novel C3HC4 type Zinc finger (ring finger)	2.0
5	401125				2.0
	412939	AW411491	Hs.2186	eukaryotic translation elongation factor	2.0
	448740	BE250632	Hs.8026	sestrin 2	2.0
	454390	AB020713	Hs.56966	KIAA0906 protein	2.0
	415012	NM_004383	Hs.77793	c-src tyrosine kinase	2.0
10	410407	X56839	Hs.63287	carbonic anhydrase IX	2.0
	403478				2.0
	456485	AJ393037	Hs.97871	Homo sapiens, clone IMAGE:3845253, mRNA,	2.0
	430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	2.0
	411669	BE612678	Hs.303116	stromal cell-derived factor 2-like 1	2.0
15	451944	AW445218	Hs.210876	ESTs	2.0
	436395	AJ227900		gb:Homo sapiens partial mRNA; ID EE2-168	2.0
	456457	AA252905	Hs.194477	E3 ubiquitin ligase SMURF2	2.0
	449123	D60920	Hs.23106	KIAA0130 gene product	2.0
	409214	AW405967	Hs.333388	Homo sapiens, clone IMAGE:3957135, mRNA,	2.0
20	437619	AW351491	Hs.334853	hypothetical protein FLJ23544	2.0
	453348	BE272318	Hs.8595	hypothetical protein FLJ12438	2.0
	424382	AA351898	Hs.23539	ESTs	2.0
	447079	AA280057	Hs.105280	ESTs, Weakly similar to dJ963K23.2 (Hsa)	2.0
	449501	AI652924	Hs.231942	ESTs	2.0
25	422893	X98411	Hs.121555	myosin IF	2.0
	412125	Y17114	Hs.73393	eyes absent (Drosophila) homolog 4	2.0
	434845	BE267057	Hs.325321	hypothetical protein R32184_1	2.0
	410422	AL042014	Hs.334698	Homo sapiens, clone MGC:15203, mRNA, com	2.0
	430255	AK000703	Hs.323822	Homo sapiens mRNA for KIAA1551 protein,	2.0
30	451656	BE327088	Hs.212752	ESTs	2.0
	442068	BE312873	Hs.314932	ESTs	2.0
	446846	AW197626	Hs.271901	ESTs, Moderately similar to S08686 finge	2.0
	442690	AI014727	Hs.160047	ESTs, Weakly similar to B28096 line-1 pr	2.0
	454277	AW295069	Hs.31743	ESTs, Weakly similar to Z157_HUMAN ZINC	2.0
35	426910	AA470023	Hs.190089	ESTs, Moderately similar to ALU1_HUMAN A	2.0
	402798				2.0
	404554				2.0

TABLE 258:

Key: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

45	Key	CAT Number	Accession
	407909	1025254_1	AW103988 BE156395 BE156391 BE156190 BE156184 BE156388 BE156394
	408432	1058667_1	AW195262 R27868 AW811262
	409193	110747_1	AA131483 AA065156 AA076448
	409745	115237_1	AA077391 AI347818 AI361453 AJ088754 AW207491 AW960912 AA921874 AA286833 AA150722 BE152353 AW188822 BE152450
	410447	1203929_1	AW816134 BE063456 AW748795 BE150839
50	410790	1221131_1	AW803357 AW803423 AW812233 R06814
	411256	1236790_1	AW834039 AW834040 AW834047 AW845410 BE003128 AW852479
	411380	1242343_1	AW841619 AW851958 AW851851 AW851985
	411632	1252361_1	AW854829 AW854805 AW854841 AW854825 AW854822 AW854830 AW854835 AW854826
	411658	1252987_1	AW855598 AW855608 BE148763 BE148764 AW855645 AW855615 AW855596 AW855610 AW855601 AW855605
55	411829	1260309_1	AW855749 BE179419 BE179492
	412225	1284108_1	AW902042 N77591
	412370	1291952_1	AW946614 AW946622 AW946663 AW946667 AW946615 AW946619
	412391	1292625_1	AW947710 AW947698 AW947697 AW947713
	413257	1355963_1	BE075035 BE074999 BE075006 BE075005 BE075032 BE075008 BE075037
60	413604	1379715_1	R51787 BE152515 Z44834 H23397
	414406	1443333_1	BE297904 BE294312
	414550	1460990_1	BE379808
	415346	1534581_1	Z43108 F06295 R13085
	415406	1536026_1	T26510 F07926 R53367
65	415586	1540116_1	Z45481 F12393 T74437
	415635	1540853_1	F13168 R21289 T77628
	416871	1626761_1	H98716 H90792 N24283
	416913	163001_1	AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499
70	417980	1712954_1	R32235 R32247 R32219
	418333	173_2	W92113 AA702794 BE044318 W91984 AA679375 T94184 AA679335 BE503126 AW502118 BE467367 AA584550 AW139964 R33353 AW088477
			AJ887846 AW502624 W81697 W81696 AA447817 AA447667 F13631 AW268271 AA055366 AW629027 AA677404 AA831618 AJ124782 AA889402
			AA765804 AA765530 AA055698 AA594019 AI267368 AA456946 R33354 AF264624 AW668618 AA601493
	418856	179649_1	AA362858 AW863761 AA229428
	419217	182954_1	AA504571 AA235243 AA411737 AW969068 AA406543
75	419225	1830274_1	U07073
	419311	183793_1	AA689591 AW974261 AA238240 AI077451 AA631399 AW974262
	420352	192979_1	BE258835 AW968316 AA258918 AW843305 R14744 AI580388 BE071923 R36280
	422128	211994_1	AW881145 AA490718 M85637 AA304575 T06087 AA331991
	422156	212379_1	N34524 AA305071 AW954803 AA502335 AI433430 AI203597 AW026670 AW265323 AW850787 AA317554 AW993643 AW835572 AW385512
80			AI334966 W32951 H62656 H53902 R88904 AW835732
	422176	212714_1	H80977 BE147695 AA305496 AW962366 AA436754
	423756	231725_1	AA828125 AA834883 AA330555
	423867	232732_1	AA331886 AW962659 AW962655 T89841
	425189	247825_1	H16622 R17322 AA351959

5	425517	252729_1	AF121179 BE162736 AA358827
	426076	260504_1	AW962714 AA389277 AA369278
	426413	266650_1	AA377823 AW954494 AI022688
	426503	268283_1	AA380153 AA380233 AW963529
	426531	268760_1	AA381071 AA381084 AA380862
	429875	310034_1	AI091815 AA460162 AA460761
	430968	326269_1	AW972830 AA527647 AA489820 AA570362
	432088	341195_1	AA525454 H74039 R89502 T77379
10	433532	368950_1	AW975367 AA598607 AA742735
	434559	38889_1	AF147315 AW173079 T53029
	435065	399329_1	BE064391 BE064395 AA663613 N99644
	436190	41555_1	AK001059 AA633055
	436395	41905_1	AJ227900 AI094933 AW051119 F00947
15	436532	421802_1	AA721522 AW975443 T93070
	436722	425758_1	AW975977 AA729469 AA747132
	436872	42851_1	X15624
	437034	431713_1	AA742643 AA808575 AW976668
	439086	46852_1	AF085947 H70981 H78989
20	439228	47001_1	N51700 AF086051 N51792
	439518	47334_1	W76326 AF086341 W72300
	439546	47360_1	AF088058 W76297 W72448
	439566	47387_1	AF086387 W77684 W72711
	439710	47550_1	AF086543 W96291 W96225
25	443657	576685_1	R14973 R14967 AI081006
	444168	593829_1	AW379879 AI126285 H12014
	444386	604004_1	BE065183 AI144398 BE065367
	451129	859870_1	BE072881 BE072946 AI762181
30	452712	928309_1	AW838616 AW838660 BE144343 AI914520 AW888910 BE184854 BE184784
	453446	967533_1	BE299996 BE297115 BE270415 BE295214 BE296526
	453638	975849_1	AW814996 AL047199 AW850979
	453746	979731_1	AL120611 BE006180 BE006189
	454377	114761_1	AA076811 AW814764
	454389	115682_1	AW752571 AW847602 AA077979
35	454606	1226149_2	AW809752 AW810271 AW809944 AW810319 AW810215 AW810368 AW810167
	454630	1227352_1	BE142075 BE142148 BE142189 AW816249 BE142147 BE142002 BE142406 BE142094 BE142020 BE142074 BE142347 BE142000 BE142375
	454631	1227443_1	AW811189 BE142133
	454679	1228929_1	AW811324 AW811325 AW811326 AW811333 AW811329 AW811328 AW811332 AW811339 AW811335
40	454967	1247021_1	AW813110 AW813113
	455023	1249188_1	AW848276 AW848416 AW848160 AW847945 AW847947 AW848063 AW848113
	455302	1276542_1	AW850907 AW850901 AW850877
	455470	1292849_1	AW997641 AW891777
45	455514	1321649_1	AW947992 AW947967 AW947950 AW947957 AW947953 AW947973 AW947966 AW947971 AW947947 AW947970 AW947995 AW947979 AW947952
	455530	1322298_1	AW947956
	455584	1334741_1	AW983871 BE090302 AW983867 AW983845 AW983860 AW983853 AW983852
	455778	1364506_1	AW984744 AW984759
	455908	1382301_1	BE007420 BE007419 BE007421 BE007422
50	456072	1470258_1	BE088748 BE088802 BE088755 BE088876 BE088881 BE088952
	456094	1504780_1	BE156306 BE156188 BE156298 BE156377 BE156374
	457374	328758_1	H54381 H54463 BE393262
	457578	359618_1	H95091 C01228
	457730	393905_1	AA493662 AW897396 BE154814
55			AA578027
			AW753613 AW753857 BE150374 BE150693 BE150394 AA808851 AA650159 AA654653 BE150419
60	TABLE 25C:		
	Pkey:	Unique number corresponding to an Eos probeset	
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.	
	Strand:	Indicates DNA strand from which exons were predicted.	
	NI_position:	Indicates nucleotide positions of predicted exons.	
65	Pkey	Ref	Strand
	400822	7465000	Plus
	400859	9757499	Minus
	400917	7283186	Minus
	400992	8096828	Plus
	401012	7230838	Minus
	401048	7232177	Plus
70	401125	8570296	Minus
	401324	9863791	Plus
	401384	6850939	Minus
	401558	7139678	Plus
	401626	8575943	Minus
75	401676	9965536	Plus
	401714	6715702	Plus
	401729	8134856	Minus
	401827	2262095	Plus
	401876	8099107	Plus
80	402028	7139781	Plus
	402064	8117294	Plus
	402239	7690131	Plus
	402408	9796239	Minus
	402424	9796344	Minus

	402516	9798099	Minus	195342-195511
	402604	9909420	Plus	20393-20767
	402627	9931216	Plus	12136-12272, 16487-16628, 17654-17788, 18494-18621, 18933-19089, 20669-20790, 21134-21298, 22866-22973, 23686-23820, 26626-26895, 29279-29469
5	402721	8969253	Minus	144428-144715
	402798	3355547	Plus	23596-23867
	402856	9801288	Minus	90119-90411
	403048	4210991	Plus	44275-44592, 49656-49955
	403108	8980955	Plus	93253-93667
10	403142	9444521	Plus	89286-90131
	403166	9838127	Minus	67762-67940, 68695-68856, 70394-70507
	403478	8958258	Plus	116458-116564
	403680	7331517	Minus	157184-157415
	403751	7229815	Minus	158794-160929
15	403790	8084957	Minus	87826-87947, 89835-90002
	403797	8099896	Minus	123065-125008
	403857	7708910	Minus	2524-3408
	403881	7710245	Minus	107250-107685, 108924-109213
	403961	7596976	Minus	110393-110603
20	403969	8569909	Plus	31237-31375, 32405-32506
	404020	8655966	Minus	174449-174663
	404054	3548785	Plus	66713-69175
	404084	9944055	Plus	2795-2969
25	404108	8247074	Minus	63603-64942
	404170	9930793	Plus	168836-169248
	404185	4572584	Minus	129171-129327
	404240	5002624	Minus	116132-116407, 116653-116922
	404295	9856663	Minus	75747-75947
	404299	5738652	Minus	3828-4025
30	404366	9964977	Plus	96589-96801
	404554	7243881	Plus	42637-42839
	404561	9795980	Minus	69039-70100
	404584	9857511	Plus	138651-139153
35	404589	9931665	Minus	32824-32985
	404642	9796810	Plus	102999-103145
	404652	9796569	Minus	108172-108296
	404721	9856648	Minus	173763-174294
	404756	7706327	Plus	82849-83627
40	404802	4581357	Minus	30093-30600
	404984	6939882	Plus	87221-87505
	405159	9966252	Plus	79659-79804
	405258	7329310	Plus	129930-130076
	405288	6139075	Minus	126268-126436
45	405353	2811095	Plus	118525-118892
	405362	2337862	Minus	105008-105142, 105980-106091, 140445-140556, 142519-142641
	405558	1621110	Plus	4502-4644, 5983-6083
	405588	5002511	Plus	46180-46366
	405605	5836195	Minus	117070-117270
50	405701	4263751	Plus	93243-93364
	405741	9966947	Minus	158747-158875, 156936-157208
	405747	8469069	Minus	153933-154060
	405771	7018349	Plus	91191-91254, 91510-91589
	405808	9929207	Plus	109758-111166
55	405884	6758747	Plus	62383-62583
	405915	7712162	Minus	43717-43859
	406028	8312303	Minus	177469-177829
	406085	9123888	Plus	18865-18843
	406169	6684220	Minus	12620-14251
60	406267	7528342	Minus	2570-2731
	406326	9212385	Plus	84508-84655
	406347	9255981	Plus	90900-91091
	406474	9795567	Plus	52768-53211
	406577	7711730	Plus	11377-11509
65	406610	8312226	Plus	13096-13334

TABLE 26A: ABOUT 582 GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES

Table 26A lists about 582 genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 3. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various tumor samples. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Key: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75<sup>th</sup> percentile normal central nervous system tissue to 85<sup>th</sup> percentile tumor

80	Key	ExAccn	UnigeneID	Unigene Title	R1
	453655	AW960427	Hs.79059	transforming growth factor, beta receptor	136.7
	417275	X63578	Hs.295449	parvalbumin	29.0
	430829	AW451999	Hs.194024	ESTs	25.7
	410657	AF063228	Hs.65248	dynein, cytoplasmic, intermediate polypeptide	22.6

5	419954	D14720	Hs.93883	myelin protein zero (Charcot-Marie-Tooth	21.2
	459247	H46243	Hs.110373	ESTs, Highly similar to T42626 secreted	18.5
	416133	NM_001683	Hs.89512	ATPase, Ca <sup>++</sup> transporting, plasma membra	15.5
	416018	AW138239	Hs.78977	proprotein convertase subtilisin/kexin I	15.2
	417167	AW206437	Hs.4290	ESTs	14.8
	433940	H05129	Hs.7459	cyclic AMP-regulated phosphoprotein, 21	13.4
	413324	V00571	Hs.75294	corticotropin releasing hormone	13.1
	439830	AA846666	Hs.151489	ESTs, Weakly similar to XE7_HUMAN PROTEI	12.6
10	408068	AW148652	Hs.167398	ESTs	12.6
	412636	NM_004415	Hs.74316	desmoplakin (DPI, DPII)	12.5
	429096	AB011106	Hs.196012	KIAA0534 protein	12.2
	412638	AA910199	Hs.203838	ESTs	12.2
	423690	AA329648	Hs.23804	ESTs, Weakly similar to PNU098 son3 prot	12.1
15	456844	AI264155	Hs.152981	CDP-diacylglycerol synthase (phosphatida	11.9
	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	10.9
	442593	R39804	Hs.31961	ESTs	10.8
	446353	AI290919	Hs.153661	ESTs	10.4
	420290	AW977318	Hs.194480	ESTs	10.3
20	414220	BE298094		gb:601118231F1 NIH_MGC_17 Homo sapiens c	10.3
	414290	AI568801	Hs.71721	ESTs	10.2
	426365	AA376667	Hs.10283	RNA binding motif protein 8B	10.0
	414937	R38698	Hs.12382	ESTs	10.0
	419643	F06066	Hs.91791	chromosome 11 open reading frame 25	9.5
25	407173	T64349		gb:yc10d08.s1 Stragene lung (937210) H	9.5
	412454	R55745	Hs.167330	ESTs	9.5
	439366	AF100143	Hs.6540	fibroblast growth factor 13	9.4
	415315	F12240	Hs.250655	prothymosin, alpha (gene sequence 28)	8.3
	441790	AW294909	Hs.132208	ESTs	9.2
30	448117	H49129	Hs.172982	ESTs	9.1
	400661				9.0
	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypotheti	9.0
	412453	R20205	Hs.167330	ESTs	9.0
35	408920	AL120071	Hs.48998	fibronectin leucine rich transmembrane p	8.9
	409031	AA376836	Hs.76728	ESTs	8.7
	428106	BE620016	Hs.182470	PTD010 protein	8.3
	446544	AI631932	Hs.7047	ESTs, Weakly similar to Unknown [H.sapie	8.2
	423479	NM_014326	Hs.129208	death-associated protein kinase 2	8.2
40	439480	AL038511	Hs.125316	ESTs, Weakly similar to S33990 finger pr	8.2
	418036	Z37976	Hs.83337	latent transforming growth factor beta b	8.0
	456490	U83171	Hs.97203	small inducible cytokine subfamily A (Cy	8.0
	410200	AA082557	Hs.101915	Stargardt disease 3 (autosomal dominant)	8.0
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	8.0
	408428	NM_014787	Hs.44896	DnaJ (Hsp40) homolog, subfamily B, membe	7.9
45	437073	AI885608	Hs.94122	ESTs	7.9
	408434	AW195317	Hs.107716	hypothetical protein FLJ22344	7.9
	438150	AA037534	Hs.79059	transforming growth factor, beta recepto	7.9
	440209	H05049	Hs.22269	neurexin 3	7.8
	408119	W26213	Hs.101672	ESTs, Weakly similar to T00331 hypotheti	7.8
50	417421	AL138201	Hs.82120	nuclear receptor subfamily 4, group A, m	7.8
	410587	AA370706	Hs.86412	chromosome 9 open reading frame 5	7.8
	429611	AI889077	Hs.211388	Homo sapiens BAC clone CTB-60N22 from 7q	7.7
	405800				7.7
	421750	AK000768	Hs.107872	hypothetical protein FLJ20761	7.7
55	426356	BE536836	Hs.98682	hypothetical protein FKSG32	7.7
	423440	R25234	Hs.143434	contactin 1	7.7
	445148	AI214510	Hs.146304	ESTs	7.6
	416294	D86980	Hs.79170	KIAA0227 protein	7.6
	424087	N89333	Hs.143434	contactin 1	7.6
60	437479	R61866	Hs.101277	ESTs	7.5
	405071				7.5
	421224	AW402154	Hs.125812	ESTs	7.4
	442025	AW887434	Hs.11810	CD411 protein	7.4
	459476	BE185844		gb:IL5-HT0731-110500-087-c08 HT0731 Homo	7.2
65	430573	AA744550	Hs.136345	ESTs	7.1
	401838				7.1
	448958	AB020651	Hs.22653	KIAA0844 protein	7.1
	430152	AB001325	Hs.234642	aquaporin 3	7.1
	419474	AW968619	Hs.155849	ESTs	7.1
70	401780				7.1
	445052	AA358760		gb:EST67699 Fetal lung II Homo sapiens c	7.0
	423605	AF047826	Hs.129887	cadherin 19, type 2	7.0
	433098	AW190593	Hs.151143	ESTs	7.0
	449511	AI436187	Hs.296261	guanine nucleotide binding protein (G pr	6.9
75	451285	AW137912	Hs.227583	Homo sapiens chromosome X map Xp11.23 L-	6.8
	428414	AL049980	Hs.184216	DKFZP564C152 protein	6.8
	419273	BE271180	Hs.293490	ESTs, Weakly similar to I38022 hypotheti	6.8
	443155	R54485	Hs.23772	ESTs	6.8
	450561	R49874	Hs.25909	ESTs	6.8
80	433068	NM_006456	Hs.288215	slalytransferase	6.8
	440729	AA904739	Hs.128204	ESTs	6.8
	448426	BE018315	Hs.280776	tankyrase, TRF1-interacting ankyrin-reta	6.7
	423589	AA328082	Hs.209569	ESTs	6.6
	415681	AI379882	Hs.72630	ESTs	6.5

	413510	F13044		gb:HSC3HH101 normalized infant brain cDN	6.4
	427992	Y15014	Hs.181353	UDP-Gal4betaGlcNAc beta 1,3-galactosyltr	6.4
	453344	BE349075	Hs.44571	ESTs	6.4
5	450642	R39773	Hs.7130	copine IV	6.4
	432251	AW972983	Hs.232165	polycythemia rubra vera 1; cell surface	6.4
	429322	D86984	Hs.199243	KIAA0231 protein	6.4
	444927	AW016637	Hs.199425	ESTs	6.4
	447482	AB033059	Hs.18705	KIAA1233 protein	6.4
	400332	S66407	Hs.248032	FLT4	6.3
10	440703	AL137663	Hs.7378	Homo sapiens mRNA; cDNA DKFZp434G227 (fr	6.3
	446129	AW244073	Hs.145946	ESTs	6.3
	454076	AW204712	Hs.61957	ESTs	6.3
	425526	AA359933		gb:EST69040 Fetal lung II Homo sapiens c	6.3
	421913	A1934365	Hs.109439	osteoeglycin (osteoinductive factor, mime	6.3
15	434273	AA913143	Hs.26303	ESTs	6.2
	408480	A1350337	Hs.164568	fibroblast growth factor 7 (keratinocyte	6.2
	451301	A1769514	Hs.209890	EST	6.2
	430754	AW862610	Hs.157068	ESTs	6.2
	438356	AA805530	Hs.48527	ESTs	6.2
20	422743	BE304678	Hs.118598	ribosomal protein L3	6.2
	453355	AW295374	Hs.31412	Homo sapiens cDNA FLJ11422 fs, clone HE	6.2
	426388	AW081394	Hs.97103	ESTs	6.2
	452502	A1904296		gb:PM-BT046-220199-288_1 BT046 Homo sapi	6.1
	402546			ESTs	6.1
25	457534	A1781307	Hs.232226	ESTs	6.1
	408165	AL137573	Hs.43143	Homo sapiens mRNA; cDNA DKFZp564A2463 (f	6.1
	404958			ESTs	6.1
	432501	BE546532	Hs.25682	Homo sapiens mRNA for KIAA1863 protein,	6.1
	442979	AW440782	Hs.174743	ESTs	6.1
30	422262	AL022315	Hs.113987	lectin, galactoside-binding, soluble, 2	6.0
	408713	NM_001248	Hs.47042	ectonucleoside triphosphate diphosphohyd	6.0
	454065	BE394588		gb:601311808F1 NIH_MGC_44 Homo sapiens c	6.0
	430004	U27768	Hs.227571	regulator of G-protein signalling 4	5.9
	401521			ESTs	5.9
35	425087	R62424	Hs.126059	ESTs	5.9
	446298	AF187813	Hs.14637	kidney- and liver-specific gene	5.9
	417761	R13727	Hs.21435	ESTs	5.9
	424806	AA382523	Hs.105689	MSTP031 protein	5.9
	441695	T12411	Hs.183745	hypothetical protein FLJ13456	5.9
40	457483	AB034694	Hs.272558	endomucin-1	5.9
	417175	R44558	Hs.94002	ESTs	5.8
	437483	AL390174		gb:Homo sapiens mRNA; cDNA DKFZp547J184	5.8
	436427	A1344378	Hs.143399	ESTs	5.8
	411939	A1365585	Hs.146246	ESTs	5.8
45	459053	A1807052	Hs.210361	ESTs	5.7
	411052	AW814950		gb:MR1-ST0206-130400-023-d06 ST0206 Homo	5.7
	431063	Z98949	Hs.326843	hypothetical protein bk125H2.1	5.7
	450382	AA397658	Hs.60257	Homo sapiens cDNA FLJ13598 fs, clone PL	5.7
	408478	NM_000806	Hs.45740	gamma-aminobutyric acid (GABA) A recepto	5.7
50	442676	A1733585	Hs.130897	ESTs	5.7
	446443	AV659082	Hs.134228	ESTs	5.7
	400865			ESTs	5.7
	459080	AW192083	Hs.290855	ESTs	5.6
	407952	A1215902	Hs.88845	ESTs, Highly similar to T50835 hypotheti	5.6
55	431984	AL080239	Hs.272284	Human DNA sequences from clone GS1-256Q22	5.6
	425705	AF007833	Hs.159265	kruppel-related zinc finger protein hKkr	5.6
	442238	AW135374	Hs.270949	ESTs, Moderately similar to F41925 hypot	5.6
	422994	AW891802	Hs.296276	ESTs	5.6
	457148	AF091035	Hs.184827	KIAA0118 protein	5.6
60	428356	AL046991	Hs.10338	ESTs	5.6
	415927	AL120168	Hs.78919	Kell blood group precursor (McLeod pheno	5.5
	402092			ESTs	5.5
	440526	A832243	Hs.211471	ESTs	5.5
	444409	A1792140	Hs.49265	ESTs	5.5
65	417877	A1025829	Hs.86320	ESTs	5.4
	458238	AW071521	Hs.333541	beta-amyloid binding protein precursor	5.4
	430702	U56979	Hs.250651	H factor 1 (complement)	5.4
	456189	H91010	Hs.44940	ESTs	5.4
	427424	AA402453	Hs.113011	ESTs	5.4
70	437354	AA749215	Hs.291888	ESTs	5.4
	455617	BE078070		gb:CM1-BT0614-160300-149-f02 BT0614 Homo	5.4
	429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	5.3
	427861	AA813185	Hs.98183	ESTs	5.3
	408556	U49516	Hs.46362	5-hydroxytryptamine (serotonin) receptor	5.3
75	444209	A1753134	Hs.146494	ESTs	5.3
	422831	R02604	Hs.332943	ESTs	5.3
	403180			ESTs	5.3
	418026	BE379727	Hs.83213	fatty acid binding protein 4, adipocyte	5.3
80	430339	W28608	Hs.239625	integral membrane protein 28	5.2
	431596	T34708	Hs.272927	Sec23 (S. cerevisiae) homolog A	5.2
	431930	AB035301	Hs.272211	cadherin 7, type 2	5.2
	437403	A1208149	Hs.121196	ESTs	5.2
	438285	AA782845	Hs.22790	ESTs	5.2

	439901	N73885	Hs.124169	ESTs	5.2
	438507	AA809052	Hs.211275	ESTs	5.2
	449222	AW293984	Hs.197621	ESTs	5.2
5	402834	AK001507	Hs.306084	Homo sapiens clone FLB5914 PRO1821 mRNA	5.2
	419042	T81429	Hs.221065	ESTs	5.2
	438777	AA731199	Hs.293130	ESTs	5.2
	445071	AI280246	Hs.149504	ESTs	5.1
	408016	AW136827	Hs.256096	ESTs	5.1
10	412047	AA934589	Hs.49696	ESTs	5.1
	436953	AW959074	Hs.23648	Homo sapiens cDNA FLJ13097 fs, clone NT	5.1
	436773	AW078629	Hs.82110	PCA and SFRS1 interacting protein 1	5.1
	409263	AA069573	Hs.50319	ESTs	5.1
	453830	AA534296	Hs.20953	ESTs	5.1
15	459580	AA022888	Hs.176065	ESTs	5.1
	417616	R07728	Hs.268668	ESTs	5.1
	423457	F08208	Hs.283844	similar to rat tricarboxylate carrier-II	5.1
	441535	AL135735	Hs.7885	phosphatidylinositol binding clathrin as	5.0
	416490	AF090116	Hs.79348	regulator of G-protein signalling 7	5.0
20	417284	N62889	Hs.107242	Homo sapiens cDNA FLJ12965 fs, clone NT	5.0
	447135	T58148		gb:cyb98g06.s1 Stratagene lung (937210) H	5.0
	448605	AL109678	Hs.21597	Homo sapiens mRNA full length insert cDN	5.0
	442240	A1791893	Hs.292719	ESTs	4.9
	459399	BE407712	Hs.153998	creatine kinase, mitochondrial 1 (ubiqui	4.9
	427972	AA864870	Hs.181304	putative gene product	4.9
25	432944	AA570687	Hs.38512	ESTs	4.9
	440198	BE560093		gb:601345159F1 NIH_MGC_8 Homo sapiens cD	4.9
	444047	A1097452	Hs.135095	ESTs	4.9
	416040	AW819158	Hs.289044	Homo sapiens cDNA FLJ12048 fs, clone HE	4.9
30	444922	A1921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL	4.8
	436670	A1690021	Hs.201536	ESTs	4.8
	448072	A1459306	Hs.24908	ESTs	4.8
	408936	AL138043	Hs.293549	ESTs	4.8
	412622	AW664708	Hs.171959	ESTs	4.8
35	414943	D80647	Hs.124193	ESTs	4.8
	429254	H10133	Hs.91846	hypothetical protein DKFZp761C121	4.8
	453567	A1742835	Hs.33368	hypothetical protein FLJ11175	4.8
	407906	AA369665	Hs.41185	Homo sapiens mRNA; cDNA DKFZp564O1262 (I	4.8
	411028	A1333660	Hs.17558	Homo sapiens cDNA FLJ14446 fs, clone HE	4.7
40	405130				4.7
	455225	AW996889		gb:QV3-BN0046-150400-151-g09 BN0046 Homo	4.7
	446218	AV657159		gb:AV657159 GLC Homo sapiens cDNA clone	4.7
	443347	A1052543	Hs.133244	melanoma-derived leucine zipper, extra-n	4.7
	402176				4.7
45	416577	BE063207	Hs.79381	grancalcin	4.7
	436221	AK001781	Hs.296543	Homo sapiens cDNA FLJ10919 fs, clone OV	4.7
	420480	AL137361	Hs.58173	hypothetical protein	4.7
	400800	Y10262	Hs.46925	eyes absent (Drosophila) homolog 3	4.6
	435161	AF124150	Hs.272091	ESTs	4.6
50	404793				4.6
	430895	U66581	Hs.248121	G protein-coupled receptor 22	4.6
	438571	AW020775	Hs.56022	ESTs	4.6
	445924	A1264671	Hs.164166	ESTs	4.6
	444585	AW170015	Hs.6594	ESTs	4.6
55	421044	AF061871	Hs.311736	Human DNA sequence from clone RP1-238D15	4.6
	418274	AA458587	Hs.128877	Human DNA sequence from clone RP1-50O24	4.6
	425475	W56339	Hs.107057	ESTs	4.6
	434311	BE543469	Hs.266263	Homo sapiens cDNA FLJ14115 fs, clone MA	4.5
	414272	A1651603	Hs.46988	ESTs	4.5
60	446235	A1564022	Hs.138207	ESTs	4.5
	414327	BE408145	Hs.185254	ESTs, Weakly similar to T24435 hypotheti	4.5
	414630	BE410857		gb:601301177F1 NIH_MGC_21 Homo sapiens c	4.5
	414456	H74314		gb:yu56e10.r1 Soares fetal liver spleen	4.5
	401024				4.5
65	414699	A1815523	Hs.76930	synuclein, alpha (non A4 component of am	4.5
	423449	A1497900	Hs.33067	ESTs	4.5
	405138				4.5
	413544	BE147225		gb:PM2-HT0225-Q31299-003-111 HT0225 Homo	4.5
	453880	A1803166	Hs.28462	ESTs, Weakly similar to I38022 hypotheti	4.5
70	433521	T66087	Hs.112482	Homo sapiens unknown mRNA sequence	4.4
	441184	AA922009	Hs.150269	ESTs	4.4
	429876	AB028977	Hs.225974	KIAA1054 protein	4.4
	445481	AW681846	Hs.148836	ESTs	4.4
	452340	NM_002202	Hs.505	ISL1 transcription factor, LIM/homeodoma	4.4
	404769				4.4
75	444331	AW193342	Hs.24144	ESTs	4.4
	429726	AW628326	Hs.27151	ESTs	4.4
	449093	AB035356	Hs.22898	neurxin 1	4.4
	451959	AA056203	Hs.27337	hypothetical protein FLJ20623	4.4
80	415716	N59294	Hs.179662	nucleosome assembly protein 1-like 1	4.4
	417888	R23053		gb:yn31a05.r1 Soares placenta Nb2HP Homo	4.4
	419656	AB002314	Hs.92025	KIAA0316 gene product	4.4
	425864	U56420	Hs.159903	olfactory receptor, family 5, subfamily	4.4
	435078	AW518888	Hs.40937	ESTs	4.4

	413493	BE144444		gb:MR0-HT0168-141199-002-009 HT0168 Homo	4.3
	432712	AB015247	Hs.288031	sterol-C5-desaturase (fungal ERG3, delta	4.3
	459650	R25754	Hs.301185	ESTs	4.3
5	404828				4.3
	423782	AI472209	Hs.323117	ESTs	4.3
	426867	AA460967	Hs.22668	ESTs	4.3
	426802	AA385182	Hs.46699	ESTs	4.3
	457353	XG5633	Hs.248144	melanocortin 2 receptor (adrenocorticotr	4.3
10	412112	BE180342		gb:RC3-HT0622-130400-012-a07 HT0622 Homo	4.3
	401522	N47812	Hs.306198	CGI-35 protein	4.3
	419055	AJ365384	Hs.11571	Homo sapiens cDNA FLJ11570 fis, clone HE	4.3
	410171	H07892	Hs.12431	ESTs	4.3
	419564	U08989	Hs.91139	solute carrier family 1 (neuronal/epithe	4.3
15	458789	AL157468	Hs.325825	Homo sapiens cDNA FLJ20848 fis, clone AD	4.3
	455040	AW852286		gb:QV0-CT0225-100400-187-d08 CT0225 Homo	4.3
	438533	AI440266	Hs.170673	ESTs, Weakly similar to T24832 hypotheti	4.3
	459005	AA447679	Hs.144558	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.2
	418489	U76421	Hs.85302	adenosine deaminase, RNA-specific, B1 (h	4.2
20	433389	AF038171		gb:Homo sapiens clone 23671 mRNA sequenc	4.2
	454356	AW390363	Hs.11522	hypothetical protein from Xq28	4.2
	442339	BE299668	Hs.227591	ESTs, Weakly similar to 1901303A Leu zip	4.2
	421249	AA285362		gb:HTH277 HTCDL1 Homo sapiens cDNA 5'/3'	4.2
	443998	AI620661	Hs.296276	ESTs	4.2
25	452197	AW023595	Hs.232048	ESTs	4.2
	451117	AA015752	Hs.205173	ESTs	4.2
	404501	AW247252	Hs.75514	nucleoside phosphorylase	4.2
	410378	R23324	Hs.41693	DnaJ (Hsp40) homolog, subfamily B, membe	4.2
	422528	AB011182	Hs.118087	KIAA0610 protein	4.2
30	440323	AA970614	Hs.127992	ESTs	4.1
	425787	AF054176	Hs.159483	chromosome 1 open reading frame 7	4.1
	434460	AA478486	Hs.3852	KIAA0368 protein	4.1
	410362	H04811	Hs.93164	proprotein convertase subtilisin/kexin 1	4.1
	413121	T96090	Hs.142678	ESTs	4.1
35	409403	AA668224	Hs.6634	Homo sapiens cDNA: FLJ22547 fis, clone H	4.1
	450235	AA007512	Hs.17538	ESTs	4.1
	449754	H00820	Hs.30977	ESTs, Weakly similar to 834087 hypotheti	4.1
	421813	BE048255		gb:tz49b05.y1 NCI_CGAP_Bm52 Homo sapien	4.1
40	408496	AI683802	Hs.138182	ESTs	4.1
	430261	AA305127	Hs.237225	hypothetical protein HT023	4.1
	434101	AA625205	Hs.259599	KIAA1622 protein	4.1
	451837	T92157	Hs.16970	ESTs	4.1
	411772	BE170301		gb:QV4-HT0536-040500-193-f05 HT0536 Homo	4.1
	437630	AI252782	Hs.153026	SWAP-70 protein	4.1
45	430212	AA469153		gb:nc67f04.s1 NCI_CGAP_Pr1 Homo sapiens	4.0
	400216				4.0
	429830	AI537278	Hs.225841	DKFZP434D193 protein	4.0
	453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	4.0
	418047	R37633	Hs.4847	ESTs	4.0
50	405354				4.0
	427931	AW206512	Hs.186996	ESTs	4.0
	428775	AA434579	Hs.143691	ESTs	4.0
	449422	AA001373	Hs.59821	ESTs	4.0
	453864	AW021407	Hs.21068	hypothetical protein	4.0
55	456407	AW968614		gb:EST380690 MAGE resequences, MAGJ Homo	4.0
	441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	4.0
	420784	T65158	Hs.102399	ESTs, Moderately similar to S65657 alpha	4.0
	425195	AA352026	Hs.94319	VPS10 domain receptor protein	4.0
	429628	H09604	Hs.13268	ESTs	4.0
60	410087	F12079	Hs.332579	ESTs	4.0
	409840	AW502122		gb:U-HF-BR0p-ajr-c-08-0-Ut.r1 NIH_MGC_5	4.0
	452854	AA437061	Hs.14050	prokineticin 1 precursor	4.0
	419910	AA662913	Hs.190173	ESTs, Weakly similar to A46010 X-linked	4.0
	427443	AA402713	Hs.97872	ESTs	4.0
65	414990	C17758	Hs.221652	Homo sapiens cDNA FLJ14323 fis, clone PL	3.9
	412678	AA115575	Hs.114914	ESTs	3.9
	405629				3.9
	420299	AI056871	Hs.15276	ESTs	3.9
	453098	Z25935	Hs.86379	ESTs	3.9
70	435752	AF230801		gb:Homo sapiens growth hormone receptor	3.9
	441005	Z41305	Hs.303172	Homo sapiens mRNA: cDNA DKFZp547G133 (fr	3.9
	414516	AI307802	Hs.135560	ESTs, Weakly similar to T43458 hypotheti	3.9
	442257	AW503831	Hs.323370	Human EST clone 25267 mariner transposon	3.9
	422563	BE299342	Hs.19348	hypothetical protein FLJ13119	3.9
75	406697	M21388	Hs.123017	Human unproductively rearranged Ig mu-ch	3.9
	443850	AW014723	Hs.334612	ESTs	3.9
	412677	AW029608	Hs.17384	ESTs	3.9
	422788	AL117352	Hs.120828	Human DNA sequence from clone RPS-876B10	3.9
	405377				3.9
80	414376	BE393856	Hs.66915	ESTs, Weakly similar to 16.7Kd protein [	3.9
	453341	AI758912	Hs.296341	adenylyl cyclase-associated protein 2	3.9
	431960	AW241821	Hs.301927	c5.1A	3.9
	416854	H40164	Hs.80298	Purkinje cell protein 4	3.9
	427264	AA400117	Hs.125747	ESTs	3.9

5	422746	NM_004484	Hs.119651	glypican 3	3.9
	452346	BE243534		gb:TCBAP1D0885 Pediatric pre-B cell acut	3.9
	414666	NM_004466	Hs.76828	glypican 5	3.8
	418217	AI910647	Hs.13442	ESTs	3.8
	419118	AA234223	Hs.139204	ESTs	3.8
10	445017	AI205493	Hs.176860	ESTs	3.8
	405867				3.8
	422760	BE409561		gb:60129986SF1 NIH_MGC_21 Homo sapiens c	3.8
	453863	X02544	Hs.572	orosomucoid 1	3.8
	457821	H47166	Hs.124322	ESTs, Weakly similar to A47582 B-cell gr	3.8
15	457330	AB013818	Hs.247220	peroxisome biogenesis factor 10	3.8
	435600	AL047034	Hs.119747	ESTs	3.8
	456083	U46922	Hs.77252	fragile histidine triad gene	3.8
	413341	H78472	Hs.191325	ESTs, Weakly similar to T18967 hypotheti	3.8
	449057	AB037784	Hs.22941	KIAA1363 protein	3.8
20	421855	FD6504	Hs.27384	ESTs, Moderately similar to ALU4_HUMAN A	3.8
	414764	AW013887	Hs.72047	ESTs	3.8
	404391				3.7
	433629	R13140	Hs.13359	ESTs	3.7
	424738	AI963740	Hs.46826	ESTs	3.7
25	401315				3.7
	407706	AA191085	Hs.26612	ESTs, Moderately similar to S23650 retro	3.7
	440530	AA888646	Hs.174187	ESTs	3.7
	433930	AA620338	Hs.273781	ESTs	3.7
	409662	AW452320	Hs.279726	ESTs	3.7
30	437268	AI754847	Hs.227571	regulator of G-protein signalling 4	3.7
	445688	AI248205	Hs.153244	ESTs	3.7
	408593	R19566	Hs.197617	ESTs	3.7
	417091	AA193283	Hs.291990	ESTs	3.7
	448556	AW885606	Hs.5064	ESTs	3.7
35	423135	N67655	Hs.28411	ESTs	3.7
	400135				3.7
	459150	BE155356		gb:PM1-HT0350-160300-009-d06 HT0350 Homo	3.7
	457221	AW383197	Hs.218260	ESTs	3.7
	451660	AI807927	Hs.249601	ESTs	3.7
40	401600	BE247275	Hs.151787	U5 snRNP-specific protein, 116 kD	3.7
	446818	AI342668	Hs.279765	ESTs	3.7
	447795	AW295151	Hs.183612	ESTs	3.7
	427562	R56424	Hs.26534	ESTs	3.6
	412258	AA376768	Hs.324841	hypothetical protein FLJ22622	3.6
45	454339	AW381980		gb:QV4-HT0316-091199-028-d05 HT0316 Homo	3.6
	439274	AF086092	Hs.48372	ESTs	3.6
	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.6
	422897	AA679784	Hs.4290	ESTs	3.6
	429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	3.6
50	421908	AW935200	Hs.285814	sprouty (Drosophila) homolog 4	3.6
	407978	AW385129	Hs.41717	phosphodiesterase 1A, calmodulin-depende	3.6
	426452	AW614271	Hs.121647	ESTs, Highly similar to AC006014 8 simil	3.6
	400685				3.6
	417154	AI674701	Hs.21388	ESTs	3.6
55	447176	Z42549	Hs.160893	ESTs	3.6
	423893	AL031709	Hs.134846	Human DNA sequence from clone 316G12 on	3.6
	449231	BE410360	Hs.298573	KIAA1720 protein	3.6
	411607	AW853498		gb:RC1-CT0252-170200-025-h02 CT0252 Homo	3.6
	405977				3.6
60	441470	BE503874	Hs.301986	ESTs	3.6
	423568	NM_005256	Hs.129818	growth arrest-specific 2	3.6
	441235	AI884586	Hs.135570	Homo sapiens cDNA: FLJ21268 fis, clone C	3.6
	450236	AW162998	Hs.24684	KIAA1376 protein	3.6
	425364	AF052150	Hs.155959	Homo sapiens clone 24533 mRNA sequence	3.6
65	426775	AA384564	Hs.108829	ESTs	3.6
	414831	M31158	Hs.77439	protein kinase, cAMP-dependent, regulato	3.6
	416876	AW501916	Hs.117897	ESTs	3.6
	400878				3.6
	425153	AW023193	Hs.27046	ESTs	3.6
70	432222	AI204995		gb:en03c03.x1 Stratagene schizo brain S1	3.5
	415047	F13142		gb:HSC3JD031 normalized Infant brain cDN	3.5
	401532				3.5
	446495	D60923	Hs.153460	ESTs	3.5
	431325	AW026751	Hs.5794	ESTs, Weakly similar to 2109260A B cell	3.5
75	445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	3.5
	455901	BE155527		gb:PM1-HT0350-190400-013-b08 HT0350 Homo	3.5
	416421	AA134006	Hs.79306	eukaryotic translation initiation factor	3.5
	455697	BE067952		gb:CM0-BT0365-061299-122-g09 BT0365 Homo	3.5
	405678				3.5
80	418207	C14685	Hs.34772	ESTs	3.5
	425383	D83407	Hs.156007	Down syndrome critical region gene 1-lik	3.5
	417027	AA192306	Hs.23926	triadin	3.5
	408367	AK001178	Hs.44424	homolog of rat orphan transporter v7-3	3.5
	417702	R09935	Hs.191148	ESTs	3.5
	445687	W80382	Hs.149297	ESTs	3.5
	408776	AA057365	Hs.63356	ESTs, Weakly similar to I38022 hypotheti	3.5
	413164	BE068494		gb:MR1-BT0371-050500-009-a12 BT0371 Homo	3.5



	414593	BE386764		gb:601273249F1 NIH_MGC_20 Homo sapiens c	3.5
	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	3.5
	415621	AI648602	Hs.55488	ESTs	3.5
5	454437	AJ248173	Hs.191460	hypothetical protein MGC12936	3.5
	446066	AI343931	Hs.149383	ESTs	3.5
	423374	AB037770	Hs.127656	KIAA1349 protein	3.5
	419347	C15944	Hs.90005	superiorocervical ganglia, neural specifi	3.5
	418516	NM_006218	Hs.85701	phosphoinositide-3-kinase, catalytic, al	3.5
10	451776	W45679	Hs.169854	hypothetical protein SP192	3.5
	432305	M62402	Hs.274313	insulin-like growth factor binding prote	3.5
	456995	T89832	Hs.170278	ESTs	3.5
	403323				3.5
	425022	M85724	Hs.154207	centromere protein C 1	3.5
15	439394	AA149250	Hs.56105	ESTs	3.4
	433803	AI823593	Hs.27688	ESTs	3.4
	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	3.4
	411474	AW848427		gb:IL3-CT0214-150200-075-H10 CT0214 Homo	3.4
	415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	3.4
20	423826	U20325	Hs.1707	cocaine- and amphetamine-regulated trans	3.4
	459495	BE544158		gb:601076707F1 NIH_MGC_12 Homo sapiens c	3.4
	427173	BE255017	Hs.87540	ESTs	3.4
	408112	AW451982	Hs.248813	ESTs	3.4
	446092	N33522	Hs.145894	ESTs	3.4
25	416868	AI656856	Hs.292597	ESTs	3.4
	458234	BE551408	Hs.127196	ESTs	3.4
	419555	AA244416		gb:nc07d11.s1 NCI_CGAP_Prl Homo sapiens	3.4
	414314	BE312991		gb:601150275F1 NIH_MGC_19 Homo sapiens c	3.4
30	400425	AY004252	Hs.287385	PR domain containing 12	3.4
	414366	BE549143		gb:601076456F1 NIH_MGC_12 Homo sapiens c	3.4
	434053	AW445136	Hs.134946	ESTs	3.4
	449997	AI683052	Hs.201577	KIAA1829 protein	3.4
	433461	AI636047	Hs.197823	ESTs	3.4
	428006	AA418743	Hs.98306	KIAA1862 protein	3.4
35	424695	U58331	Hs.151899	sarcoglycan, delta (35kD dystrophin-asso	3.4
	443294	AI733625	Hs.133053	ESTs	3.4
	428212	AW444451	Hs.134812	ESTs	3.4
	457673	AA551569	Hs.272034	hypothetical protein PRO2822	3.4
40	446390	AA233393	Hs.14992	hypothetical protein FLJ11151	3.3
	428536	AI143139	Hs.2288	visinin-like 1	3.3
	426597	AA382250	Hs.145601	ESTs	3.3
	410366	AI267589	Hs.302689	hypothetical protein	3.3
	458258	AW406546	Hs.127971	ESTs	3.3
	401738				3.3
45	409038	T87490	Hs.50002	small inducible cytokine subfamily A (Cy	3.3
	425785	T27017	Hs.159528	Homo sapiens clone 24400 mRNA sequence	3.3
	433328	AW298159	Hs.23644	ESTs, Weakly similar to S65824 reverse t	3.3
	414541	BE293116	Hs.76392	aldehyde dehydrogenase 1 family, member	3.3
	434998	AW975157	Hs.26037	ESTs	3.3
50	456359	AI967991	Hs.93574	homeo box D3	3.3
	426527	NM_001037	Hs.170238	sodium channel, voltage-gated, type I, b	3.3
	454267	AA437199	Hs.656	cell division cycle 25C	3.3
	400302	N48056	Hs.1915	folate hydrolase (prostate-specific memb	3.3
	434077	AF116659	Hs.321151	Homo sapiens PRO1412 mRNA, complete cds	3.3
55	436602	AI793222	Hs.166817	ESTs	3.3
	449204	AB000099	Hs.23251	Down syndrome critical region gene 4	3.3
	417935	R53697	Hs.170044	ESTs	3.3
	423310	AA325225	Hs.124023	Homo sapiens cDNA FLJ14218 fls, clone NT	3.3
	436624	T64297	Hs.5241	fatty acid binding protein 1, liver	3.3
60	453406	AI192987	Hs.61784	hypothetical protein FLJ14451	3.3
	420164	AW339037	Hs.24908	ESTs	3.3
	447826	AW779317	Hs.258556	ESTs	3.3
	419875	AA853410	Hs.93557	proenkephalin	3.3
	444612	AW138111	Hs.22902	ESTs	3.3
65	418504	BE158718	Hs.85335	Homo sapiens mRNA; cDNA DKFZp564D1462 (I	3.2
	415242	R45988	Hs.295014	ESTs	3.2
	418188	AW139413	Hs.151880	ESTs	3.2
	430355	NM_006219	Hs.239818	phosphoinositide-3-kinase, catalytic, be	3.2
	421640	AW966652		gb:EST378726 MAGE resequences, MAGI Homo	3.2
70	432359	AA076049	Hs.274415	Homo sapiens cDNA FLJ10229 fls, clone HE	3.2
	408806	AW847814	Hs.289005	Homo sapiens cDNA: FLJ21532 fls, clone C	3.2
	400409	AF153341	Hs.283954	Homo sapiens winged helix/forkhead trans	3.2
	446015	T30968	Hs.13531	hypothetical protein FLJ10971	3.2
	425495	AA358454	Hs.78026	ESTs, Weakly similar to similar to ankyr	3.2
75	403092				3.2
	452971	AI873878	Hs.91789	ESTs	3.2
	454186	BE141030		gb:MR0-HT0067-201099-002-h11 HT0067 Homo	3.2
	401485				3.2
	401949				3.2
80	457452	AW972675		gb:EST384766 MAGE resequences, MAGI Homo	3.2
	454100	AI693231	Hs.126043	chromosome 21 open reading frame 51	3.2
	448440	AA173467	Hs.62402	p21/Cdc42/Rac1-activated kinase 1 (yeast	3.2
	421200	AA284811	Hs.264433	ESTs	3.2
	430142	NM_000437	Hs.234392	platelet-activating factor acetylhydrola	3.2

5	433197	AB040889	Hs.281022	KIAA1456 protein	3.2
	443509	AV645470		gb:AV645470 GLC Homo sapiens cDNA clone	3.2
	440827	AJ733110	Hs.128128	ESTs	3.2
	432799	NM_016161	Hs.278960	alpha-1,4-N-acetylglucosaminyltransferase	3.2
	409257	AW370362		gb:RC1-BT0255-181099-012-d07 BT0255 Homo	3.2
	459235	BE246010	Hs.271468	Homo sapiens mRNA for FLJ00038 protein,	3.2
	416789	AA223439	Hs.79933	cyclin I	3.2
	429809	AL182010	Hs.223603	Homo sapiens mRNA; cDNA DKFZp761D09121 (	3.2
10	420156	AW449258	Hs.6187	ESTs	3.2
	455577	BE006341		gb:RC2-BN0127-240300-011-b05 BN0127 Homo	3.2
	400617	AF151064	Hs.36069	hypothetical protein	3.2
	437129	AL049327	Hs.302057	Homo sapiens mRNA; cDNA DKFZp564E016 (fr	3.2
	451820	AW058357	Hs.337353	ESTs	3.2
15	457535	AA609685	Hs.278672	membrane component, chromosome 11, surfa	3.2
	419956	AL137939	Hs.40096	ESTs	3.1
	456235	AA203637		gb:zx58b12.r1 Soares_fetal_liver_spleen_	3.1
	423930	AA332697	Hs.42721	ESTs	3.1
	403796				3.1
20	414085	AA114018	Hs.75748	aldehyde dehydrogenase 1 family, member	3.1
	445886	AJ793176	Hs.145596	ESTs	3.1
	414401	AJ760159	Hs.124833	ESTs	3.1
	441573	BE563966	Hs.6529	ESTs, Weakly similar to I78885 serine/th	3.1
	450725	R71389	Hs.175851	ESTs	3.1
25	458605	AJ282933	Hs.23294	hypothetical protein FLJ14393	3.1
	417868	AJ078534	Hs.122592	ESTs	3.1
	458391	AJ792628	Hs.133273	ESTs	3.1
	423346	AJ267877	Hs.127416	synaptotagmin 1	3.1
	454486	AW857077		gb:RC1-CT0302-140300-016-104 CT0302 Homo	3.1
30	408341	AW182952	Hs.249957	ESTs	3.1
	410669	AW805749	Hs.318885	superoxide dismutase 2, mitochondrial	3.1
	404907				3.1
	434910	AJ333863	Hs.215474	ESTs, Moderately similar to alternative	3.1
	436990	AJ149729	Hs.120557	ESTs	3.1
35	441921	AJ733376	Hs.164478	hypothetical protein FLJ21939 similar to	3.1
	454873	AW812807		gb:RC3-ST0186-070100-016-c04 ST0186 Homo	3.1
	429470	AJ878901	Hs.203862	guanine nucleotide binding protein (G pr	3.1
	404345	AA730407	Hs.159156	protocadherin 11	3.1
	408217	AJ433201	Hs.279860	tumor protein, translationally-controlled	3.1
40	417313	AA195602		gb:zr3209.r1 Soares_NhHMPu_S1 Homo sapi	3.1
	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	3.1
	411003	AA181018	Hs.13056	hypothetical protein FLJ13920	3.1
	425339	AA936330	Hs.198113	ESTs	3.1
	426716	NM_006379	Hs.171921	sema domain, immunoglobulin domain (lg),	3.1
45	449078	AK001258	Hs.22975	KIAA1576 protein	3.1
	429608	U49250	Hs.210862	T-box, brain, 1	3.1
	442308	AA989402	Hs.111	fibroblast growth factor 9 (glia-activat	3.1
	428465	AW970976	Hs.293653	ESTs	3.1
	411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	3.1
50	447965	AW292577	Hs.94445	ESTs	3.1
	413918	AW015898	Hs.71245	ESTs	3.1
	419682	H13139	Hs.92282	paired-like homeodomain transcription fa	3.1
	425810	AJ923627	Hs.31903	ESTs	3.1
	427865	AA116931	Hs.126065	ESTs	3.1
55	429060	AW139155	Hs.194995	hypothetical protein DKFZp434O0320	3.1
	430708	U78308	Hs.278485	olfactory receptor, family 1, subfamily	3.1
	448084	AJ467800	Hs.271000	ESTs, Weakly similar to I38022 hypotheti	3.1
	454506	AW847346		gb:RC0-CT0205-240999-021-e01 CT0205 Homo	3.1
	414629	AA345824	Hs.76688	carboxylesterase 1 (monocytic/macrophage	3.0
60	422963	M79141	Hs.13234	ESTs	3.0
	417696	BE241624	Hs.82401	CD69 antigen (p60, early T-cell activati	3.0
	448175	BE296174	Hs.225160	hypothetical protein FLJ13102	3.0
	414686	BE409757	Hs.23189	ESTs, Moderately similar to T8B2_HUMAN T	3.0
	458360	AJ027207	Hs.132253	ESTs	3.0
65	451829	AW964081	Hs.247377	ESTs	3.0
	445179	AJ949743	Hs.224768	ESTs	3.0
	433090	AJ720050	Hs.145362	immortalization-upregulated protein	3.0
	432018	AA524447	Hs.152377	ESTs	3.0
	407988	N47760	Hs.285107	hypothetical protein FLJ13397	3.0
	405911				3.0
70	418808	AJ821836	Hs.10359	ESTs	3.0
	431900	AW972048	Hs.192534	ESTs	3.0
	452893	H18017	Hs.22869	ESTs, Moderately similar to KIAA1396 pro	3.0
	423952	AW877787	Hs.136102	KIAA0853 protein	3.0
75	412000	AW576555	Hs.15780	ATP-binding cassette, sub-family A (ABC1	3.0
	405793				3.0
	410711	AB002316	Hs.65746	KIAA0318 protein	3.0
	411279	AW884776		gb:QV4-OT0067-010300-121-d01 OT0067 Homo	3.0
	423957	AW978309	Hs.136235	Homo sapiens cDNA FLJ13542 fs, clone PL	3.0
80	427071	AA397958	Hs.192719	ESTs	3.0
	434961	AW974956		gb:EST387061 MAGE resequences, MAGN Homo	3.0

TABLE 26B:

Key: Unique Eos probe set identifier number

CAT number.		Gene cluster number	
Accession:		Genbank accession numbers	
5	Key	CAT Number	Accession
	409257	1112994_1	AW370362 AW809101
	409840	1156071_1	AW502122 AW502125 AW501663 AW501720
	411052	1230374_1	AW814950 R98513 H69459 BE176242 H54583
	411279	1237516_1	AW884776 AW935737 AW835261 AW835247 AW835246 AW835263 AW835240 AW835258
	411474	1247047_2	AW848427 AW848890 AW848159 AW848118 AW848634 AW848285 AW848086 AW848485 AW848283 AW848162
10	411607	1251251_1	AW853498 AW853442 AW853590 AW853433 AW853592
	411772	1257386_1	BE170301 AW861539 AW904851 BE154336 BE154090 BE154275
	412112	1277883_1	BE180342 BE180347 AW901900 BE180222 BE180218 BE180226 BE180413 BE180416 AW901899 BE180228 AW901897 BE180224 AW901898
			BE180223 BE180219 BE180346 BE180343 BE180418 BE180225 BE180221 BE180341 AW901894 BE180217 BE180227 AW901891 BE180345
			AW893814 AW893815 H85799 H83501 BE180220
15	413164	1351422_1	BE068494 BE068414 BE068332 BE068347 BE068706 BE068623 BE068450 BE068480 BE068350 BE068295 BE068498 BE068765 BE068328
			BE068778 BE068871 BE068526 BE068493 BE068433 BE068740 BE068306 BE068631 BE068580 BE068445 BE068567 BE068521 BE068549
			BE068392 BE068307 BE068692 BE068473 BE068754 BE068476 BE068685 BE068628 BE068591 BE068745 BE068434 BE068759 BE068628
			BE068723 BE068529 BE068689 BE068383 BE068422 BE068470 BE068522 BE068618 BE068354 BE068748 BE068683 BE068303 BE068602
			BE068739 BE068374 BE068302 BE068625 BE068596 BE068663 BE068429 BE068605 BE068693 BE068672 BE068401 BE068579 BE068329
20			BE068390 BE068419 BE068393 BE068447 BE068675 BE068311 BE068540 BE068301 BE068543 BE068719 BE068369 BE068324 BE068588
			BE068568 BE068317 BE068384 BE068547 BE068674 BE068436 BE068321 BE068361 BE068676 BE068499 BE068299 BE068352 BE068410
			BE068293 BE068418 BE068552 BE068598 BE068327 BE068550 BE068712 BE068661 BE068733 BE068525 BE068752 BE068357 BE068330
			BE068565 BE068538 BE068340 BE068537 BE068761 BE068632 BE068758
			BE144444 BE144430
25	413493	1373555_1	F13044 T77009 BE145525 BE145493
	413510	1374377_1	BE147225 BE147205 BE147234
	413544	1375671_1	BE298094 BE267860
	414220	1426940_1	BE312991 BE272945
	414314	1435028_1	BE549143 BE390613 BE277344
	414366	1438638_1	H74314 BE299593
30	414456	1447655_1	BE386764 BE387560
	414593	1464909_1	BE410857 BE390605
	414630	1468083_1	F13142 Z42926 F06135 F06147 H08517 D51360 T75341
	415047	1517450_1	AA195602 W01148 N40632
35	417313	166644_1	R23053 R79884 R76271
	417888	1706092_1	AA244416 AA244401
	419555	185884_1	AA285362 AW752386 AW847156 AA285373 AW879575 AW879558
	421249	200649_1	AW966652 AW966653 AA294989 AA385977
	421640	204833_1	BE048255 AA313083 AA298419
40	421813	207654_1	BE409561 BE162756 AW732798
	422760	221034_1	AA359333 AA358889 AW955306 AW962995 AW837746 AW837755 AW837697
	425526	252776_1	AA469153 A1718503 AA489225
	430212	314437_1	A1204995 AW827539 AW969908 AW440776 AA528756
	432222	343347_1	AF038171 Z43209 F07347
45	433389	36497_1	AW974956 AA781075 AA554944
	434961	396357_1	AF230801 AF230800 AA401795 AA398260
	435752	41050_1	AL390174 AW898817
	437483	43756_1	BE560093
	440198	48824_2	AV645470 T84636 T82805
50	443509	57199_1	AA358760 AA158850 AW062737 AW062738 AV656291
	446052	65988_1	AV657159 BE145509 BE145512 BE145505 BE145507
	446218	66688_1	T58148 AW516579 AW059603
	447135	70963_1	BE243534 BE243752 A1880228 L44326
	452346	912206_1	A1904296 BE007223 R30687
55	452502	919733_1	BE394588 AW024754 BE183166 BE183167
	454085	998401_1	BE141030 BE141474 BE141467 BE141753 BE141024 BE141761 AW177583 AW177579 AW177582 AW177585 AW177587 AW807582 AW177581
	454186	1049791_1	BE141477 BE141520 BE141456 BE141492 BE141028 BE141775 BE141409 BE141751 AW177599 BE141750 AW177597 BE141512 BE141460
			BE141749 AW177598
60	454339	1122972_1	AW381980 BE152244 BE152235 BE152238 BE152232
	454486	1215703_1	AW857077 AW861268 AW847383 AW795787
	454506	1219857_1	AW847346 AW847395 AW847408 AW847385 AW847342 AW847396 AW847339 AW801718 AW801787
	454673	1228569_1	AW812807 AW812815 AW812802
	455040	1250028_1	AW852286 AW851934 AW852096 AW852274
65	455225	1262318_1	AW996689 AW996380 AW996453 BE085650 AW868687 BE085595
	455577	1333898_1	BE006341 BE006307 BE006311
	455617	1348117_1	BE078070 BE061030 BE077927
	455697	1351148_1	BE067952 BE067945 BE067942 BE067943 BE067949 BE067954 BE067944 BE067953 BE067956 BE067946
	455901	1381569_1	BE155527 BE155503 BE155188 BE155126
70	456235	168686_1	AA203637 AA832266 H67452
	456407	184986_1	AW968614 AA243209 AA281411
	457452	339381_1	AW972675 AA541366 AA523039
	459150	919196_1	BE155356 BE153488 BE153481 BE155059 BE155210 BE155413 BE153577 BE153688 BE155063 BE155347 A1903640 BE155492
75	TABLE 26C:		
	Key:	Unique number corresponding to an Eos probe set	
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.	
	Strand:	Indicates DNA strand from which exons were predicted.	
80	NI_position:	Indicates nucleotide positions of predicted exons.	
	Key	Ref	Strand
	400661	8118474	Plus
	400685	8118768	Minus
			NI_position
			84912-85187
			72969-73050,73713-73800

5	400865	1945037	Minus	44482-45526
	400878	9864757	Plus	31493-32842
	401024	8117489	Plus	60551-60802
	401315	9212516	Minus	198960-199619
	401485	7341723	Plus	68009-68209,68841-69077
	401521	7705251	Plus	9127-9234
	401532	7798785	Plus	124414-124950,125050-125418
	401738	2982169	Minus	41547-41757
10	401780	7249190	Minus	28397-28617,28920-29045,29135-29296,29411-29567,29705-29787,30224-30573
	401836	7534063	Plus	71981-72084
	401949	3492889	Plus	160728-161660
	402092	7249154	Minus	107533-108094
	402178	7543687	Minus	10-750
15	402546	7637348	Plus	24873-25170
	403092	8954241	Plus	174720-175016,175104-175406,175508-175813
	403180	7523976	Minus	63603-63759
	403323	8348082	Minus	120366-120845
	403796	8098896	Minus	75073-77664
20	404391	3135305	Minus	26030-26173,27852-27997
	404769	8099713	Minus	175801-176823
	404793	7232206	Minus	61087-61590
	404828	6580415	Minus	26291-27253
	404907	7331453	Minus	102880-103828
25	404958	7407941	Minus	2731-4531
	405071	7708797	Minus	11115-11552
	405130	8516045	Plus	150235-150449
	405138	8576241	Plus	90303-90516
	405354	2642452	Plus	52213-53089
30	405377	5649375	Plus	216656-216848
	405629	4508116	Minus	101678-101866
	405678	4079670	Plus	151821-152027
	405793	1405887	Minus	89197-89453
	405800	2791346	Plus	19271-19813
35	405867	6758731	Minus	74553-75173
	405911	6758795	Plus	101008-101643
	405977	8247789	Minus	135548-136177

TABLE 27A: ABOUT 533 CNS-ENRICHED GENES SIGNIFICANTLY DOWN-REGULATED IN GLIOBLASTOMA COMPARED TO NORMAL ADULT CNS TISSUES

Table 27A lists about 533 CNS-enriched genes significantly down-regulated in glioblastoma compared to normal adult CNS tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" normal CNS to "average" glioblastoma was greater than or equal to 2. The "average" normal CNS level was set to the 75<sup>th</sup> percentile amongst various normal CNS tissues. The "average" glioblastoma level was set to the 85<sup>th</sup> percentile amongst various tumor samples. To enrich for CNS specific genes, the ratio of "average" CNS to "average" non-CNS normal adult tissues was calculated to be greater than or equal to 2. The "average" CNS level was set to the 85<sup>th</sup> percentile amongst various CNS tissues. The "average" normal non-CNS adult tissue level was set to the 85<sup>th</sup> percentile amongst various non-CNS normal tissues. In order to remove gene-specific background levels of non-specific hybridization, the 10<sup>th</sup> percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratios were evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of 75<sup>th</sup> percentile normal central nervous system tissue to 85<sup>th</sup> percentile tumor  
 R2: Ratio of 85<sup>th</sup> percentile central nervous system tissue to 85<sup>th</sup> percentile normal body tissue

55	Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
	417275	X63578	Hs.295449	parvalbumin	29.0	30.0
	430829	AW451999	Hs.194024	ESTs	25.7	6.2
	410657	AF063228	Hs.65248	dynen, cytoplasmic, intermediate polype	22.8	25.8
	419954	D14720	Hs.93883	myelin protein zero (Charcot-Marie-Tooth	21.2	30.3
60	416133	NM_001683	Hs.89512	ATPase, Ca <sup>++</sup> transporting, plasma membra	15.5	16.8
	416018	AW138239	Hs.78977	proprotein convertase subtilisin/kexin 1	15.2	18.0
	417167	AW206437	Hs.4290	ESTs	14.8	17.7
	433940	H05129	Hs.7459	cyclic AMP-regulated phosphoprotein, 21	13.4	18.1
	413324	V00571	Hs.75294	corticotropin releasing hormone	13.1	18.0
65	438830	AA846666	Hs.151489	ESTs, Weakly similar to XE7_HUMAN PROTEI	12.6	16.5
	408068	AW148652	Hs.167398	ESTs	12.6	16.9
	429096	AB011106	Hs.196012	KIAA0534 protein	12.2	21.1
	412638	AA910199	Hs.203838	ESTs	12.2	16.0
	442593	R39804	Hs.31961	ESTs	10.8	15.0
	446353	AI290919	Hs.153661	ESTs	10.4	13.2
70	426365	AA376667	Hs.10283	RNA binding motif protein 88	10.0	5.9
	414937	R38698	Hs.12382	ESTs	10.0	10.8
	419643	F06066	Hs.91791	chromosome 11 open reading frame 25	9.5	10.9
	412454	RS5745	Hs.167330	ESTs	9.5	14.1
75	439366	AF100143	Hs.6540	fibroblast growth factor 13	9.4	12.3
	441790	AW294909	Hs.132208	ESTs	9.2	3.2
	448117	H49129	Hs.172982	ESTs	9.1	12.8
	433558	AA833757	Hs.201769	ESTs, Weakly similar to T24435 hypotheti	9.0	14.7
	412453	R20205	Hs.187330	ESTs	9.0	13.7
80	408920	AL120071	Hs.48998	fibronectin leucine rich transmembrane p	8.9	17.3
	409031	AA376836	Hs.76728	ESTs	8.7	8.6
	446544	AI631932	Hs.7047	ESTs, Weakly similar to Unknown (H.s.aple	8.2	20.0
	439480	AL038511	Hs.125316	ESTs, Weakly similar to S33990 finger pr	8.2	8.3
	410200	AA082557	Hs.101915	Stargardt disease 3 (autosomal dominant)	8.0	8.9

408428	NM_014787	Hs.44896	OnaJ (Hsp40) homolog, subfamily B, membe	7.9	9.6
437073	A885608	Hs.94122	ESTs	7.9	11.3
408434	AW195317	Hs.107716	hypothetical protein FLJ22344	7.9	16.4
440209	H05049	Hs.22269	neurexin 3	7.8	34.3
408119	W26213	Hs.101672	ESTs, Weakly similar to T00331 hypothe	7.8	9.0
429611	A889077	Hs.211388	Homo sapiens BAC clone CTF-60N22 from 7q	7.7	5.0
423440	R25234	Hs.143434	contactin 1	7.7	9.9
445148	AI214510	Hs.146304	ESTs	7.6	9.1
416294	D86980	Hs.79170	KIAA0227 protein	7.6	7.6
424087	N69333	Hs.143434	contactin 1	7.6	10.3
437479	R61856	Hs.101277	ESTs	7.5	9.3
430673	AA744550	Hs.136345	ESTs	7.1	2.8
448958	AB020651	Hs.22653	KIAA0844 protein	7.1	10.4
419474	AW968619	Hs.155849	ESTs	7.1	3.0
423605	AF047826	Hs.129887	cadherin 19, type 2	7.0	6.9
433098	AW190593	Hs.151143	ESTs	7.0	9.2
449511	A1436187	Hs.296261	guanine nucleotide binding protein (G pr	6.9	3.1
428414	AL049980	Hs.184216	DKFZP564C152 protein	6.8	5.0
443155	R54485	Hs.23772	ESTs	6.8	3.5
450561	R49674	Hs.25909	ESTs	6.8	8.1
433068	NM_006456	Hs.288215	stahytransferase	6.8	2.0
423589	AA328082	Hs.209569	ESTs	6.6	10.5
415681	AI379892	Hs.72630	ESTs	6.5	9.0
413510	F13044		gb:HSC3HH101 normalized infant brain cDN	6.4	7.1
427992	Y15014	Hs.181353	UDP-Gal:betaGlcNAc beta 1,3-galactosyltr	6.4	9.5
450642	R39773	Hs.7130	copine IV	6.4	5.7
429322	D66984	Hs.199243	KIAA0231 protein	6.4	8.2
447482	AB033059	Hs.18705	KIAA1233 protein	6.4	2.3
446129	AW244073	Hs.145946	ESTs	6.3	8.3
421913	AI934365	Hs.109439	osteoglycin (osteoinductive factor, mime	6.3	2.1
434273	AA913143	Hs.26303	ESTs	6.2	10.3
408480	AI350337	Hs.164568	fibroblast growth factor 7 (keratinocyte	6.2	3.5
451301	AI769514	Hs.209890	EST	6.2	12.4
438356	AA805530	Hs.48527	ESTs	6.2	8.1
426388	AW081394	Hs.97103	ESTs	6.2	8.6
452502	AI904296		gb:PM-BT046-220199-286_1 BT046 Homo sapi	6.1	2.8
408165	AL137573	Hs.43143	Homo sapiens mRNA; cDNA DKFZp564A2463 (f	6.1	6.3
442979	AW440782	Hs.174743	ESTs	6.1	6.3
408713	NM_001248	Hs.47042	ectonucleoside triphosphate diphosphohyd	6.0	3.8
430004	U27768	Hs.227571	regulator of G-protein signaling 4	5.9	21.4
425087	R62424	Hs.126059	ESTs	5.9	8.1
441695	T12411	Hs.183745	hypothetical protein FLJ13456	5.9	3.1
417175	R44558	Hs.94002	ESTs	5.8	12.5
437483	AL390174		gb:Homo sapiens mRNA; cDNA DKFZp547J184	5.8	2.2
436427	AI344378	Hs.143399	ESTs	5.8	13.8
450382	AA397658	Hs.60257	Homo sapiens cDNA FLJ13598 fs, clone PL	5.7	4.4
408478	NM_000806	Hs.45740	gamma-aminobutyric acid (GABA) A recepto	5.7	12.5
442676	AI733585	Hs.130897	ESTs	5.7	6.8
446443	AV659082	Hs.134228	ESTs	5.7	6.4
459080	AW192083	Hs.290855	ESTs	5.6	15.6
431984	AL080239	Hs.272284	Human DNA sequence from clone GS1-256022	5.6	8.2
428356	AL046991	Hs.10338	ESTs	5.6	6.2
417877	AI025829	Hs.86320	ESTs	5.4	4.9
429290	AF203032	Hs.198760	neurofilament, heavy polypeptide (200kD)	5.3	13.1
408556	U49516	Hs.46362	5-hydroxytryptamine (serotonin) receptor	5.3	6.6
431930	AB035301	Hs.272211	cadherin 7, type 2	5.2	6.0
438285	AA782845	Hs.22790	ESTs	5.2	7.3
439901	N73885	Hs.124169	ESTs	5.2	2.7
449222	AW293984	Hs.197621	ESTs	5.2	8.1
408016	AW136827	Hs.256096	ESTs	5.1	2.5
436953	AW959074	Hs.23648	Homo sapiens cDNA FLJ13097 fs, clone NT	5.1	3.0
436773	AW078629	Hs.82110	PC4 and SFRS1 interacting protein 1	5.1	7.3
409263	AA069573	Hs.50319	ESTs	5.1	12.9
453830	AA534296	Hs.20953	ESTs	5.1	3.4
441535	AL135735	Hs.7885	phosphatidylinositol binding clathrin as	5.0	4.8
416490	AF090116	Hs.79348	regulator of G-protein signaling 7	5.0	20.1
417284	N62889	Hs.107242	Homo sapiens cDNA FLJ12965 fs, clone NT	5.0	3.9
448605	AL109678	Hs.21597	Homo sapiens mRNA full length insert cDN	5.0	6.1
442240	AI791883	Hs.292719	ESTs	4.9	6.7
427972	AA864870	Hs.181304	putative gene product	4.9	5.2
416040	AW819158	Hs.289044	Homo sapiens cDNA FLJ12048 fs, clone HE	4.9	2.8
444922	AI921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL	4.8	3.7
408936	AL138043	Hs.283549	ESTs	4.8	6.6
414943	D80647	Hs.124193	ESTs	4.8	3.1
429254	H10133	Hs.91846	hypothetical protein DKFZp761C121	4.8	2.3
407906	AA369665	Hs.41185	Homo sapiens mRNA; cDNA DKFZp564O1262 (f	4.8	9.1
416577	BE063207	Hs.79381	grancalcin	4.7	2.2
420480	AL137361	Hs.98173	hypothetical protein	4.7	2.8
404793				4.6	2.2
430895	U66581	Hs.248121	G protein-coupled receptor 22	4.6	7.4
438571	AW020775	Hs.56022	ESTs	4.6	5.4
444585	AW170015	Hs.6594	ESTs	4.6	6.0
414272	AI651603	Hs.46988	ESTs	4.5	2.2

414699	AI815523	Hs.76930	synuclein, alpha (non A4 component of am	4.5	30.9
423449	AI497900	Hs.33067	ESTs	4.5	20.8
433521	T66087	Hs.112482	Homo sapiens unknown mRNA sequence	4.4	2.0
429876	AB028977	Hs.225974	KIAA1054 protein	4.4	19.2
429726	AW628326	Hs.27151	ESTs	4.4	10.2
449093	AB035356	Hs.22998	neuroxin 1	4.4	9.4
415716	N59294	Hs.179662	nucleosome assembly protein 1-like 1	4.4	15.1
419656	AB002314	Hs.92025	KIAA0316 gene product	4.4	8.2
425864	U56420	Hs.159903	olfactory receptor, family 5, subfamily	4.4	2.4
435078	AW518888	Hs.40937	ESTs	4.4	5.7
432712	AB016247	Hs.288031	sterol-C5-desaturase (fungal ERG3, delta	4.3	5.9
426887	AA460967	Hs.22668	ESTs	4.3	6.0
412112	BE180342		gb:RC3-HT0622-130400-012-e07 HT0622 Homo	4.3	3.2
410171	H07892	Hs.12431	ESTs	4.3	5.3
442339	BE299668	Hs.227591	ESTs, Weakly similar to 1901303A Leu zip	4.2	5.0
421249	AA285362		gb:HTH277 HTCDL1 Homo sapiens cDNA 573	4.2	3.5
422528	AB011182	Hs.118087	KIAA0610 protein	4.2	3.9
434460	AA478486	Hs.3852	KIAA0368 protein	4.1	8.3
410362	H04811	Hs.93164	proprotein convertase subtilisin/kexin 1	4.1	7.0
449754	H00820	Hs.30977	ESTs, Weakly similar to B34087 hypothe	4.1	3.9
408496	AI683802	Hs.136182	ESTs	4.1	4.7
434101	AA625205	Hs.259599	KIAA1622 protein	4.1	6.3
430212	AA469153		gb:nc67104.s1 NCI_CGAP_Py1 Homo sapiens	4.0	2.5
453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	4.0	7.4
456407	AW968614		gb:EST380690 MAGE resequences, MAGJ Homo	4.0	5.1
441869	NM_003947	Hs.8004	huntingtin-associated protein interactin	4.0	32.3
429628	H09604	Hs.13268	ESTs	4.0	4.5
410087	F12079	Hs.332579	ESTs	4.0	6.9
419910	AA62913	Hs.190173	ESTs, Weakly similar to A46010 X-linked	4.0	2.6
441005	Z41305	Hs.303172	Homo sapiens mRNA; cDNA DKFZp547G133 (tr	3.9	21.7
412677	AW029608	Hs.17384	ESTs	3.9	2.2
453341	AI758912	Hs.296341	adenylyl cyclase-associated protein 2	3.9	7.2
416854	H40164	Hs.80296	Purkinje cell protein 4	3.9	2.2
414666	NM_004466	Hs.76828	glypican 5	3.8	6.2
418217	AI910647	Hs.13442	ESTs	3.8	3.2
421855	F06504	Hs.27384	ESTs, Moderately similar to ALU4_HUMAN A	3.8	2.2
414764	AW013887	Hs.72047	ESTs	3.8	10.7
433629	R13140	Hs.13359	ESTs	3.7	2.7
424738	AI963740	Hs.46826	ESTs	3.7	2.1
407706	AA191085	Hs.26612	ESTs, Moderately similar to S23650 retro	3.7	5.3
437268	AI754847	Hs.227571	regulator of G-protein signalling 4	3.7	53.7
423135	N57655	Hs.26411	ESTs	3.7	21.7
446818	AI342668	Hs.279765	ESTs	3.7	2.6
427562	R56424	Hs.26534	ESTs	3.6	3.6
439274	AF086092	Hs.48372	ESTs	3.6	34.5
452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.6	6.0
422897	AA679784	Hs.4290	ESTs	3.6	5.1
429656	X05608	Hs.211584	neurofilament, light polypeptide (68kD)	3.6	24.6
417154	AI674701	Hs.21388	ESTs	3.6	5.8
447176	Z42549	Hs.160893	ESTs	3.6	6.4
405977				3.6	3.9
423568	NM_005256	Hs.129818	growth arrest-specific 2	3.6	2.5
441235	AI884588	Hs.135570	Homo sapiens cDNA: FLJ21268 fs, clone C	3.6	5.4
426775	AA384564	Hs.108829	ESTs	3.6	3.4
414831	M31158	Hs.77439	protein kinase, cAMP-dependent, regulato	3.6	2.8
425153	AW023193	Hs.27046	ESTs	3.6	4.9
446495	D60923	Hs.153460	ESTs	3.5	9.8
445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	3.5	16.6
418421	AA134006	Hs.79306	eukaryotic translation initiation factor	3.5	5.0
418207	C14685	Hs.34772	ESTs	3.5	16.0
425383	D83407	Hs.156007	Down syndrome critical region gene 1-like	3.5	6.2
417027	AA192306	Hs.23928	bradin	3.5	2.5
408367	AK001178	Hs.44424	homolog of rat orphan transporter v7-3	3.5	5.3
408776	AA057365	Hs.63356	ESTs, Weakly similar to I38022 hypothe	3.5	5.5
453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	3.5	23.6
419347	C15844	Hs.90005	superiorcervical ganglia, neural specifi	3.5	42.3
433803	AI823593	Hs.27688	ESTs	3.4	3.6
450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	3.4	4.1
415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	3.4	9.8
423826	U20325	Hs.1707	cocaine- and amphetamine-regulated trans	3.4	4.7
427173	BE255017	Hs.97540	ESTs	3.4	2.4
446092	N33522	Hs.145894	ESTs	3.4	3.5
416868	AI856856	Hs.292597	ESTs	3.4	4.5
458234	BE551408	Hs.127196	ESTs	3.4	4.5
434053	AW445136	Hs.134946	ESTs	3.4	3.9
428536	AI143139	Hs.2288	visinin-like 1	3.3	42.3
410366	AI267589	Hs.302689	hypothetical protein	3.3	14.4
425785	T27017	Hs.159528	Homo sapiens clone 24400 mRNA sequence	3.3	4.6
434998	AW975157	Hs.26037	ESTs	3.3	4.7
456359	AI967991	Hs.93574	homeo box D3	3.3	4.4
426527	NM_001037	Hs.170238	sodium channel, voltage-gated, type I, b	3.3	5.2
400302	N48056	Hs.1915	folate hydrolase (prostate-specific memb	3.3	9.0
419875	AA853410	Hs.93557	proenkephalin	3.3	3.6

	444612	AW138111	Hs.22902	ESTs	3.3	3.0
	415242	R45986	Hs.295014	ESTs	3.2	2.2
	421640	AW966652		gb:EST378726 MAGE resequences, MAGI Homo	3.2	3.8
	408808	AW847814	Hs.289005	Homo sapiens cDNA: FLJ21532 fis, clone C	3.2	2.4
5	446015	T30968	Hs.13531	hypothetical protein FLJ10971	3.2	3.2
	425495	AA358454	Hs.78026	ESTs, Weakly similar to similar to ankyr	3.2	2.2
	403092				3.2	2.9
	452971	A1873878	Hs.91789	ESTs	3.2	4.5
	454100	AI693231	Hs.126043	chromosome 21 open reading frame 51	3.2	2.7
10	448440	AA173467	Hs.62402	p21/Cdc42/Rac1-activated kinase 1 (yeast	3.2	2.8
	421200	AA284811	Hs.264433	ESTs	3.2	2.7
	440827	AI733110	Hs.128128	ESTs	3.2	2.1
	429809	AL162010	Hs.223603	Homo sapiens mRNA: cDNA DKFZp761009121 (	3.2	4.3
	420156	AW449258	Hs.6187	ESTs	3.2	19.0
15	457535	AA509685	Hs.278672	membrane component, chromosome 11, surfa	3.2	2.0
	419956	AL137939	Hs.40096	ESTs	3.1	8.7
	423930	AA332697	Hs.42721	ESTs	3.1	2.7
	417868	AI078534	Hs.122592	ESTs	3.1	12.6
	423346	AI267677	Hs.127416	synaptojanin 1	3.1	12.0
20	441921	AI733376	Hs.164478	hypothetical protein FLJ21939 similar to	3.1	4.3
	429470	AI878901	Hs.203862	guanine nucleotide binding protein (G pr	3.1	5.3
	408217	AI433201	Hs.279860	tumor protein, translationally-controlled	3.1	7.1
	427322	AK002017	Hs.176227	hypothetical protein FLJ11155	3.1	6.3
25	449078	AK001256	Hs.22975	KIAA1576 protein	3.1	30.1
	429608	U49250	Hs.210862	T-box, brain, 1	3.1	2.2
	442308	AA989402	Hs.111	fibroblast growth factor 9 (gla-activat	3.1	3.0
	411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	3.1	10.9
	427865	AA416931	Hs.126065	ESTs	3.1	7.5
30	430708	U78308	Hs.278485	olfactory receptor, family 1, subfamily	3.1	3.4
	451829	AW964081	Hs.247377	ESTs	3.0	6.2
	405911				3.0	2.4
	418808	AJ821838	Hs.10359	ESTs	3.0	6.2
	452893	H18017	Hs.22869	ESTs, Moderately similar to KIAA1395 pro	3.0	5.1
	423952	AW877787	Hs.136102	KIAA0853 protein	3.0	2.1
35	412000	AW575555	Hs.15780	ATP-binding cassette, sub-family A (ABC1	3.0	2.1
	405793				3.0	2.7
	410711	AB002316	Hs.65746	KIAA0318 protein	3.0	14.3
	427071	AA397958	Hs.192719	ESTs	3.0	2.1
40	453534	NM_014796	Hs.33187	KIAA0748 gene product	3.0	14.5
	413903	AA496493	Hs.23138	ESTs	3.0	2.2
	426866	U02330	Hs.172816	neuregulin 1	3.0	11.3
	434945	AB033065	Hs.4280	KIAA1239 protein	3.0	3.5
	412639	AW961284	Hs.296235	ESTs	2.9	4.9
45	453590	AF150278	Hs.33578	KIAA0820 protein	2.9	33.1
	414502	AL133721	Hs.224680	ESTs	2.9	2.3
	434367	AB020700	Hs.3830	KIAA0893 protein	2.9	23.1
	425121	AJ797511	Hs.154879	synaptotagmin I	2.9	8.1
	412494	AL133900	Hs.792	ADP-ribosylation factor domain protein 1	2.9	20.8
50	401213				2.9	3.2
	401028	AW673312	Hs.50848	hypothetical protein FLJ20331	2.9	3.4
	415191	AA190381	Hs.120810	ESTs	2.9	3.0
	449275	AW450848	Hs.205457	perlecan	2.9	5.6
	419863	AW952691	Hs.93485	Homo sapiens mRNA: cDNA DKFZp761D191 (fr	2.9	35.0
55	411421	BE272110	Hs.21177	ESTs	2.9	2.0
	430865	AI073424	Hs.5232	HSPC125 protein	2.9	11.4
	437486	AW952089	Hs.5636	RAB6A, member RAS oncogene family	2.9	2.2
	442357	AI458586	Hs.135706	ESTs	2.9	6.0
	408274	R17315		gb:yg12g11.1 Soares infant brain 1N18 H	2.9	2.2
60	444185	AW298350	Hs.66020	ESTs	2.8	5.0
	420173	AA256151	Hs.22999	ESTs	2.8	5.1
	428358	AA993222	Hs.101915	Stargard1 disease 3 (autosomal dominant)	2.8	7.0
	447252	R90916	Hs.12449	Homo sapiens transmembrane protein HTMP1	2.8	4.4
	440260	AI972867	Hs.7130	copine IV	2.8	10.6
65	417084	H08370	Hs.33067	ESTs	2.8	8.4
	438257	AW474419	Hs.224794	ESTs	2.8	2.8
	441934	T23939	Hs.7344	ESTs	2.8	6.2
	447885	F11528	Hs.303172	Homo sapiens mRNA: cDNA DKFZp547G133 (tr	2.8	3.5
	423552	AF107028	Hs.129783	sodium channel, voltage-gated, type II,	2.8	3.4
70	450940	AJ744943	Hs.143209	ESTs, Weakly similar to I38022 hypothesi	2.8	14.4
	410011	AB020641	Hs.57856	PFTAIRE protein kinase 1	2.8	21.7
	445887	AI263105	Hs.145597	ESTs	2.8	5.1
	425494	N55540	Hs.78026	ESTs, Weakly similar to similar to ankyr	2.8	2.4
	438202	AW169287	Hs.22568	ESTs	2.8	11.9
	436199	R38948	Hs.127951	hypothetical protein FLJ14503	2.8	6.0
75	434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	2.8	2.4
	415462	R52692	Hs.12698	ESTs	2.8	3.4
	418070	NM_000844	Hs.83407	glutamate receptor, metabotropic 7	2.8	4.5
	432149	AW614326	Hs.157022	ESTs, Weakly similar to T34549 probable	2.8	9.5
80	430371	D87468	Hs.240112	KIAA0276 protein	2.8	7.0
	437357	AL359559	Hs.331666	Homo sapiens mRNA: cDNA DKFZp762O2215 (I	2.7	2.5
	415838	R44336	Hs.7093	ESTs	2.7	3.6
	438875	AA813725	Hs.213568	ESTs	2.7	2.5
	419558	AW953679		gb:EST365749 MAGE resequences, MAGC Homo	2.7	3.1

	446318	AF949389	Hs.18067	ESTs	2.7	4.1
	445183	AB007877	Hs.12385	KIAA0417 gene product	2.7	5.3
	457012	R41480	Hs.127630	ESTs	2.7	19.0
5	431988	AC002302	Hs.77202	protein kinase C, beta 1	2.7	7.2
	430223	NM_002514	Hs.235935	nephroblastoma overexpressed gene	2.7	2.8
	447932	AA837474	Hs.20021	vesicle-associated membrane protein 1 (s	2.7	3.8
	450214	BE439763	Hs.227571	regulator of G-protein signalling 4	2.7	6.9
	434731	AA648049	Hs.121518	ESTs	2.7	5.0
10	428839	AI767756	Hs.82302	Homo sapiens cDNA FLJ14814 fs, clone NT	2.7	5.2
	407709	AA456135	Hs.23023	ESTs	2.7	2.5
	422420	U03398	Hs.1524	tumor necrosis factor (ligand) superfam	2.7	3.3
	443305	AI050693	Hs.133318	ESTs	2.7	5.9
	435648	H24347	Hs.27524	ESTs	2.7	15.0
15	418407	AL044818	Hs.84928	nuclear transcription factor Y, beta	2.7	2.7
	436771	AW975687	Hs.292979	ESTs	2.7	6.0
	428689	NM_014351	Hs.189810	sulfotransferase family 4A, member 1	2.7	4.8
	440503	NM_006539	Hs.7235	calcium channel, voltage-dependent, gamma	2.7	4.4
	441006	AW605267	Hs.7627	CGI-60 protein	2.7	3.1
20	410330	AW023630	Hs.46786	ESTs	2.6	29.5
	434398	AA121098	Hs.3838	serum-inducible kinase	2.6	2.6
	438831	BE263273	Hs.6439	synapsin II	2.6	7.8
	419066	Z98492	Hs.6975	PRO1073 protein	2.6	3.4
	412643	AW971239	Hs.293982	ESTs	2.6	2.2
25	430456	AA314998	Hs.241503	hypothetical protein	2.6	17.9
	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	2.6	2.9
	401421				2.6	2.0
	419530	X98330	Hs.90821	ryanodine receptor 2 (cardiac)	2.6	4.2
	441817	AW969706	Hs.293332	ESTs	2.6	3.8
30	439203	AA448930	Hs.8453	KIAA1587 protein	2.6	4.2
	426054	U12431	Hs.168109	ELAV (embryonic lethal, abnormal vision,	2.6	5.1
	444583	AW994403	Hs.100861	hypothetical protein FLJ14600	2.6	3.7
	417919	AI928203	Hs.86379	ESTs	2.6	3.0
	434293	NM_004445	Hs.3796	EphB6	2.6	3.2
35	431716	D89053	Hs.268012	fatty-acid-Coenzyme A ligase, long-chain	2.6	6.4
	443037	AW500305	Hs.299166	synixin 7	2.6	2.2
	440736	D56919	Hs.265848	myomegalin	2.6	7.1
	404648				2.6	3.0
	429995	AA463571		gb:zx72e09.r1 Soares_total_fetus_Nb2HF8_	2.6	3.5
40	436508	AW604381	Hs.121121	ESTs, Weakly similar to S00755 pleckstri	2.6	3.9
	441190	H09073	Hs.25048	ESTs	2.6	3.1
	432278	AL137506	Hs.274256	hypothetical protein FLJ23563	2.6	2.9
	442731	AI868167	Hs.131044	ESTs	2.6	4.1
	416836	D54745	Hs.80247	cholecystokinin	2.6	14.9
45	449071	NM_005872	Hs.22960	breast carcinoma amplified sequence 2	2.5	2.4
	436321	AA709133	Hs.180144	ESTs	2.5	2.8
	439693	AI741816	Hs.125897	ESTs	2.5	3.6
	443212	AW269515	Hs.102500	hypothetical protein FLJ20481	2.5	2.8
	429981	AL122104	Hs.136664	Homo sapiens mRNA; cDNA DKFZp434A1627 (f	2.5	3.8
50	407868	NM_000950	Hs.40637	proline-rich Gla (G-carboxyglutamic acid	2.5	3.1
	443992	AW022228	Hs.322922	ESTs	2.5	27.9
	444124	R43097	Hs.6818	ESTs	2.5	5.3
	411379	AI816344	Hs.12554	ESTs, Weakly similar to NPL4_HUMAN NUCLE	2.5	38.0
	440474	AI207936	Hs.7195	gamma-aminobutyric acid (GABA) A recepto	2.5	3.8
55	446277	AI284218	Hs.159204	ESTs	2.5	2.2
	410111	AI620206	Hs.189647	ESTs	2.5	3.5
	445162	AB011131	Hs.12378	piccolo (presynaptic cytomatrix protein)	2.5	4.8
	410718	AI920783	Hs.191433	ESTs	2.5	4.5
	417201	T60432	Hs.269084	ESTs, Moderately similar to AF097994 1 L	2.5	2.9
60	420274	AW968000	Hs.143389	ESTs, Weakly similar to T14318 ubiquitin	2.5	2.8
	433496	AF084254	Hs.49765	VLCS-H1 protein	2.5	4.7
	437331	AL353933	Hs.21710	hypothetical protein DKFZp761G0313	2.5	3.3
	437368	AI471969	Hs.182606	ESTs	2.5	3.0
	441985	BE047625	Hs.169815	ESTs	2.5	3.8
65	410025	BE220489	Hs.113592	ESTs, Moderately similar to I54374 gene	2.5	9.2
	414680	AA743331	Hs.272572	hemoglobin, alpha 2	2.5	3.6
	429956	AI374651	Hs.22542	ESTs	2.5	23.9
	429028	AA443439	Hs.48797	ESTs	2.5	2.8
	438109	AI076621	Hs.71367	ESTs, Moderately similar to ALU7_HUMAN A	2.5	3.1
70	439780	AL109688		gb:Homo sapiens mRNA full length insert	2.5	2.3
	440888	N45600	Hs.326880	ESTs	2.5	3.9
	445246	AI217713	Hs.147586	ESTs	2.5	2.6
	440152	AB002376	Hs.7006	KIAA0378 protein	2.4	23.6
	432740	AF061034	Hs.278898	tumor necrosis factor alpha-inducible ce	2.4	2.1
75	415122	D60708	Hs.22245	ESTs	2.4	3.9
	432298	AL118812	Hs.274293	Homo sapiens mRNA; cDNA DKFZp761G1111 (f	2.4	9.8
	437948	AA772920	Hs.303527	ESTs	2.4	9.8
	421360	AA297012	Hs.103839	erythrocyte membrane protein band 4.1-d	2.4	2.8
	427115	AW972853	Hs.112237	ESTs	2.4	2.2
80	452074	BE299035	Hs.27747	G protein-coupled receptor 37 (endotheli	2.4	10.0
	436639	D14838	Hs.111	fibroblast growth factor 9 (glia-activat	2.4	3.5
	434520	AA205273	Hs.177011	hypothetical protein	2.4	3.1
	411529	AA430348	Hs.317596	Homo sapiens cDNA FLJ12927 fs, clone NT	2.4	3.0
	442272	AA988302	Hs.129172	ESTs	2.4	2.1



	422927	AW247388	Hs.301423	calcium binding protein 1 (calbrain)	2.4	2.7
	444647	H14718	Hs.11506	Human clone 23589 mRNA sequence	2.4	2.8
	415827	H17462	Hs.23079	ESTs	2.4	15.0
5	451397	AA017432	Hs.84529	ESTs, Weakly similar to Z202_HUMAN ZINC	2.4	3.9
	445200	AA084460	Hs.12409	somatostatin	2.4	3.7
	451062	AL110125	Hs.25910	Homo sapiens mRNA; cDNA DKFZp564C1416 (I	2.4	2.4
	420328	Y19062	Hs.96870	slauten (Drosophila, RNA-binding protein	2.4	4.3
	432122	AA526514		gb:ni50K02.s1 NCI_CGAP_Ov2 Homo sapiens	2.4	4.3
10	444125	AI124882	Hs.118121	ESTs	2.4	3.5
	430538	AB032435	Hs.242821	differentiation-associated Na-dependent	2.4	10.8
	457519	X69438	Hs.3052	early growth response 4	2.4	2.4
	409371	R51736	Hs.12381	ESTs	2.4	2.1
	456303	AA224872	Hs.115088	ESTs	2.4	3.2
15	440105	AA694010	Hs.6932	Homo sapiens clone 23809 mRNA sequence	2.4	23.4
	400979				2.4	4.1
	435296	R49685	Hs.24980	ESTs	2.4	6.5
	408950	AA707814	Hs.14945	long fatty acyl-CoA synthetase 2 gene	2.4	18.5
	452032	BE244006	Hs.27610	retinoic acid- and interferon-inducible	2.4	2.2
20	432098	AF252297	Hs.91546	cytochrome P450 retinoid metabolizing pr	2.4	2.7
	408974	AW015458	Hs.297017	ESTs	2.4	2.5
	412177	ZZ3091	Hs.73734	glycoprotein V (platelet)	2.4	2.8
	413153	N94205		gb:za27a08.r1 Soares fetal liver spleen	2.4	2.5
	417583	AA668782	Hs.191284	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.4	2.6
25	452034	F12234	Hs.75893	ankyrin 3, node of Ranvier (ankyrin G)	2.3	3.0
	424940	AA985308	Hs.194327	ESTs	2.3	6.3
	431706	AI816086	Hs.296341	adenylyl cyclase-associated protein 2	2.3	4.1
	419125	AA842452	Hs.130881	B-cell CLL/lymphoma 11A (zinc finger pro	2.3	2.9
	423641	AL137256	Hs.130489	ATPase, aminophospholipid transporter-4	2.3	8.7
30	436407	T88803	Hs.271507	ESTs, Weakly similar to TIM_HUMAN PROBAB	2.3	3.2
	448681	AL109781	Hs.21754	Homo sapiens mRNA full length insert cDN	2.3	5.2
	415669	NM_005025	Hs.78589	serine (or cysteine) proteinase inhibito	2.3	54.7
	410765	AI694972	Hs.66180	nucleosome assembly protein 1-like 2	2.3	9.1
	422386	AF105374	Hs.115830	heparan sulfate (glucosamine) 3-O-sulfot	2.3	5.0
35	414828	AA156651		gb:zK05h05.r1 Soares_pregnant_uterus_NbH	2.3	2.4
	445556	AI910241	Hs.12887	actin-related protein 3-beta	2.3	8.5
	426968	U07616	Hs.173034	amphiphysin (Stiff-Mann syndrome with br	2.3	26.3
	444562	AA186715	Hs.335429	RIKEN cDNA 9130422N19 gene	2.3	2.5
40	423420	AI571364	Hs.128382	Homo sapiens mRNA; cDNA DKFZp76111224 (I	2.3	7.6
	439450	R51613	Hs.125304	ESTs	2.3	26.3
	427127	AW802282	Hs.22265	pyruvate dehydrogenase phosphatase	2.3	2.2
	447179	AW015633	Hs.157299	ESTs	2.3	3.8
	414711	AI310440	Hs.288735	Homo sapiens cDNA FLJ13522 fs, clone PL	2.3	2.3
	433449	AW772282		gb:hn71b05.x1 NCI_CGAP_Kid11 Homo sapien	2.3	3.8
45	414320	U13616	Hs.75893	ankyrin 3, node of Ranvier (ankyrin G)	2.3	2.5
	416778	M16505	Hs.78876	steroid sulfatase (microsomal), arylsulf	2.3	7.8
	425130	AA448208	Hs.99163	ESTs	2.3	4.1
	456664	AW963354	Hs.334409	metallothionein 1G	2.3	2.5
	438283	AI458931	Hs.37282	ESTs	2.3	4.2
50	417455	AW007066	Hs.18949	ESTs, Weakly similar to CA2B_HUMAN COLLA	2.3	3.0
	412100	AW892731		gb:CMO-NN0005-100300-279-c02 NN0005 Homo	2.3	3.7
	448981	AI968719	Hs.195387	ESTs	2.3	3.2
	416101	R24854	Hs.268806	ESTs	2.3	6.5
	439731	AI953135	Hs.45140	hypothetical protein FLJ14084	2.3	17.8
55	415734	NM_014747	Hs.78748	KIAA0237 gene product	2.3	40.1
	424598	AB020639	Hs.151017	estrogen-related receptor gamma	2.3	2.9
	420230	AL034344	Hs.284186	forkhead box C1	2.3	2.4
	451559	AL119980	Hs.20935	hypothetical protein DKFZp7610221	2.3	5.7
	404835				2.3	2.1
60	456765	AI497900	Hs.33067	ESTs	2.3	4.1
	455517	AW984068		gb:RCO-HN0006-160300-011-e06 HN0006 Homo	2.3	2.4
	408206	AF041853	Hs.43670	kinesin family member 3A	2.2	18.5
	411770	NM_014278	Hs.71992	heat shock protein (hsp110 family)	2.2	3.9
	430105	X70297	Hs.2540	cholinergic receptor, nicotinic, alpha p	2.2	2.6
65	458694	F12832	Hs.13298	ESTs	2.2	4.9
	415091	AL044872	Hs.77910	3-hydroxy-3-methylglutaryl-Coenzyme A sy	2.2	4.4
	439642	W81441	Hs.153967	ESTs	2.2	2.4
	450138	AW152104	Hs.200879	ESTs	2.2	4.9
	454222	BE144344	Hs.7589	ESTs, Weakly similar to A46010 X-linked	2.2	3.7
	405326				2.2	2.7
70	431342	AW971018	Hs.21659	ESTs	2.2	5.2
	453101	AW952776	Hs.94943	ESTs	2.2	3.3
	408897	N50204	Hs.283709	lipopolysaccharide specific response-7 p	2.2	2.8
	451398	AI793124	Hs.144479	ESTs	2.2	4.6
75	438208	AL041224	Hs.65379	ESTs	2.2	10.4
	408449	NM_004408	Hs.188181	dynamitin 1	2.2	6.1
	414130	AI670831	Hs.71592	Homo sapiens cDNA: FLJ21893 fs, clone H	2.2	3.1
	445016	U79716	Hs.12246	reslin	2.2	3.9
	424375	AF070547	Hs.146312	Homo sapiens clone 24820 mRNA sequence	2.2	2.3
80	424645	NM_014682	Hs.151449	KIAA0535 gene product	2.2	11.7
	409729	D51315	Hs.106289	ESTs	2.2	4.9
	432809	AA565509	Hs.131703	ESTs	2.2	19.9
	422890	Z43784	Hs.75893	ankyrin 3, node of Ranvier (ankyrin G)	2.2	10.4
	428532	AF157326	Hs.184786	TBP-interacting protein	2.2	6.5

	413074	AI871368	Hs.8417	hypothetical protein DKFZp761M0423	2.2	3.4
	414442	AA156238	Hs.32501	ESTs	2.2	3.2
	452768	AW069459	Hs.61539	ESTs	2.2	2.0
5	450440	AB024334	Hs.25001	tyrosine 3-monooxygenase/tryptophan 5-mo	2.2	3.2
	426281	AK000987	Hs.169111	oxidation resistance 1	2.2	2.3
	428411	AW291464	Hs.10338	ESTs	2.2	2.3
	413787	AI352558	Hs.75544	tyrosine 3-monooxygenase/tryptophan 5-mo	2.2	3.1
	451734	NM_006176	Hs.26944	neurogranin (protein kinase C substrate,	2.2	8.5
10	439108	AW163034	Hs.6467	synaptogyrin 3	2.2	7.9
	405385				2.2	2.4
	447285	AI371849	Hs.200696	ATPase, Class VI, type 11C	2.2	2.2
	452667	T87219	Hs.13219	ESTs	2.2	3.1
	422234	AF119818	Hs.113287	discs, large (Drosophila) homolog-associ	2.1	6.3
15	410339	AI916499	Hs.298258	ESTs	2.1	3.2
	413231	D87461	Hs.75244	BCL2-like 2	2.1	4.5
	447104	R19085	Hs.210706	Homo sapiens cDNA FLJ13182 fis, clone NT	2.1	2.2
	451952	AL120173	Hs.301663	ESTs	2.1	36.5
	415841	Z45837	Hs.7093	ESTs	2.1	2.4
20	441086	AI928489	Hs.213490	ESTs, Weakly similar to N33_HUMAN N33 PR	2.1	2.2
	450407	NM_000810	Hs.24969	gamma-aminobutyric acid (GABA) A recepto	2.1	6.6
	427827	R87582	Hs.179915	guanine nucleotide binding protein (G pr	2.1	5.3
	449712	R56545	Hs.6100	ESTs	2.1	4.5
	409660	AW452065	Hs.258905	ESTs	2.1	2.1
25	430434	AL049548	Hs.241420	Homo sapiens mRNA for KIAA1756 protein,	2.1	5.4
	434138	AA625804		gb:zu86h01.s1 Soares_testis_NHT Homo sap	2.1	3.0
	448610	NM_006157	Hs.21602	nel (chicken)-like 1	2.1	4.8
	418948	AI217097		gb:gd43h07.x1 Soares_fetal_heart_NbHH19W	2.1	2.9
	414876	AW950925	Hs.924	crystallin, mu	2.1	3.4
30	440426	AI159800	Hs.7181	Homo sapiens cDNA FLJ13663 fis, clone PL	2.1	3.7
	451249	AA016227	Hs.27280	ESTs	2.1	4.1
	451475	T19093	Hs.26450	KIAA0725 protein	2.1	2.1
	448743	AB032962	Hs.21895	KIAA1136 protein	2.1	29.7
	430814	U89336	Hs.247993	NG5 protein	2.1	2.7
35	426990	AL044315	Hs.173094	Homo sapiens mRNA for KIAA1750 protein,	2.1	2.3
	426642	AW068223	Hs.171581	ubiquitin C-terminal hydrolase UCH37	2.1	4.5
	427335	AA448542	Hs.251877	G antigen 7B	2.1	2.2
	459089	F13036	Hs.27373	Homo sapiens mRNA; cDNA DKFZp564O1763 (I	2.1	2.3
40	435832	AA425688	Hs.41641	Bruno (Drosophila) -like 4, RNA binding	2.1	5.9
	446383	T05816	Hs.92511	ESTs	2.1	2.9
	412768	AW996044	Hs.26239	Human DNA sequence from clone RP11-438B2	2.1	2.1
	453976	BE463830	Hs.163714	ESTs	2.1	4.2
	415111	R39039	Hs.328455	EST	2.1	3.3
	452238	F01811	Hs.187931	ESTs	2.1	4.9
45	445279	R41900	Hs.22245	ESTs	2.1	9.8
	448799	AI937094	Hs.179808	ESTs	2.1	3.1
	418338	NM_002522	Hs.84154	neuronal pentraxin I	2.1	8.3
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	2.1	5.4
50	443537	D13305	Hs.203	cholecystokinin B receptor	2.1	4.1
	454066	X00356	Hs.37058	calcitonin/calcitonin-related polypeptid	2.1	6.4
	429954	AI918130	Hs.21374	ESTs	2.1	7.2
	415292	H29016	Hs.200576	ESTs	2.1	3.9
	423563	R34734	Hs.75209	protein kinase (cAMP-dependent, catalyti	2.1	3.1
	424906	AI566086	Hs.153716	Homo sapiens mRNA for Hmob33 protein, 3'	2.1	4.7
55	459309	AA040620	Hs.5672	hypothetical protein AF140225	2.1	2.2
	439340	AB032436	Hs.6535	brain-specific Na-dependent inorganic ph	2.1	4.7
	402598	BE314624	Hs.3128	polymerase (RNA) II (DNA directed) polyp	2.1	5.4
	435408	F26698	Hs.4884	calcium/calmodulin-dependent protein kin	2.1	6.6
	448792	R42550	Hs.12826	ESTs	2.1	4.1
60	449500	AW96345	Hs.12926	ESTs	2.1	2.4
	441134	W29092	Hs.7678	cellular retinoic acid-binding protein 1	2.1	5.8
	433361	AW469373	Hs.300141	ribosomal protein L39	2.1	2.7
	452946	X95425	Hs.31092	EphA5	2.1	5.0
	426167	AF039023	Hs.167496	RAN binding protein 6	2.0	2.2
65	453666	AW015681	Hs.135229	ESTs, Weakly similar to A2BP_HUMAN ATAXI	2.0	3.1
	424632	AB014523	Hs.151406	KIAA0623 gene product	2.0	3.5
	448589	AF017090	Hs.21554	KIAA1107 protein	2.0	4.1
	430416	AC005531	Hs.57806	Homo sapiens PAC clone RP4-701O16 from 7	2.0	2.3
	445627	AW818475	Hs.7363	ESTs	2.0	2.1
70	417092	H97508	Hs.181165	eukaryotic translation elongation factor	2.0	2.5
	453653	AW505554	Hs.144559	ESTs	2.0	4.7
	435850	AF250847	Hs.283514	mitochondrial ceramidase	2.0	3.7
	435086	AW975243	Hs.122596	ESTs	2.0	2.1
	423191	D61506	Hs.8417	hypothetical protein DKFZp761M0423	2.0	2.1
75	411582	AL050201	Hs.70769	hypothetical protein DKFZp586E1923	2.0	2.8
	431645	AF078949	Hs.266483	dymen light chain-A	2.0	2.5
	429834	AI929645	Hs.225936	synapsin I	2.0	3.6
	439607	BE540565	Hs.159460	ESTs	2.0	17.5
	408033	AW138045	Hs.242256	ESTs	2.0	4.0
80	430317	AB020645	Hs.239189	glutaminase	2.0	2.7
	419631	AW188117	Hs.303154	popeye protein 3	2.0	2.6
	432660	AI288430	Hs.64004	ESTs	2.0	2.3
	454048	H05626	Hs.6921	ESTs	2.0	15.9
	426917	AA913814	Hs.172854	DKFZP586B0923 protein	2.0	3.1

5	423246	AL119114	Hs.77196	spectrin, alpha, non-erythrocytic 1 (atp	2.0	2.9
	415989	AI267700	Hs.317584	ESTs	2.0	4.8
	420276	AA290938	Hs.190561	ESTs, Highly similar to SORL_HUMAN SORTI	2.0	5.1
	424983	AI742434	Hs.169911	ESTs	2.0	15.9
	446296	AA985662	Hs.63131	Homo sapiens cDNA FLJ13155 fis, clone NT	2.0	2.7
	450006	AI241555	Hs.60171	ESTs	2.0	3.5
10	TABLE 27B:					
	Pkey:	Unique Eos probeset identifier number				
	CAT number:	Gene cluster number				
	Accession:	Genbank accession numbers				
15	Pkey	CAT Number	Accession			
	408274	104999_1	R17315 Z43964 AA053547			
	412100	1277224_1	AW892731 H08502 Z45826			
	412112	1277883_1	BE180342 BE180347 AW901900 BE180222 BE180218 BE180226 BE180413 BE180416 AW901699 BE180228 AW901897 BE180224 AW901898 BE180223 BE180219 BE180346 BE180343 BE180418 BE180225 BE180221 BE180341 AW901894 BE180217 BE180227 AW901891 BE180345 AW903614 AW893615 H05799 H03501 BE180220			
20	413153	1350849_1	N94205 BE067565 BE067558			
	413510	1374377_1	F13044 T77009 BE145525 BE145493			
	414828	149563_1	AA156651 AA156622 R14472			
	418948	180608_1	AI217097 AW886090 W38035 W38792 AA232835 AW936043			
	419558	185904_1	AW953679 AW953680 AA244436 H82527 AA361046 AA244483 H82526			
25	421249	200649_1	AA285362 AW752388 AW847156 AA285373 AW879575 AW879558			
	421640	204833_1	AW966652 AW966653 AA294989 AA385977			
	429995	311739_1	AA463571 AI277645 AL118763			
	430212	314437_1	AA469153 AI718503 AA469225			
	432122	341756_1	AA526514 AW973343 AA554293			
30	433449	366532_1	AW772282 AA592974			
	434138	380572_1	AA625804 AW418787 AW074833 AI675642 AI393368			
	437483	43756_1	AL390174 AW898817			
	439780	47673_1	AL105688 R23665 R26578			
	452502	919733_1	AI904296 BE007223 R30687			
35	455517	1321782_1	AW984068 AW984072 AW984077			
	456407	184986_1	AW968614 AA243209 AA281411			

40	TABLE 27C:			
	Pkey:	Unique number corresponding to an Eos probeset		
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.		
	Strand:	Indicates DNA strand from which exons were predicted.		
	NL_position:	Indicates nucleotide positions of predicted exons.		
45	Pkey	Ref	Strand	NL_position
	400979	8072554	Plus	150842-161028
	401213	9858408	Plus	98243-98380,98489-98619
	401421	7452889	Minus	142291-142461
	403092	8954241	Plus	174720-175016,175104-175406,175508-175813
50	404648	9796894	Minus	115334-116020
	404793	7232206	Minus	61087-61590
	404835	6970743	Plus	85482-85684,88139-88287,90338-91018,94827-94990
	405326	4375975	Plus	10633-10709,30805-30893,38078-38253,55112-55327,57718-57818,66696-66841
	405385	6552772	Plus	48332-48454
55	405793	1405887	Minus	89197-89453
	405911	6758795	Plus	101008-101643
	405977	8247789	Minus	135548-136177

60	TABLE 28A: About 139 genes up-regulated in glioma compared to normal adult tissues			
65	Table 28A lists about 139 genes up-regulated in glioma compared to normal adult tissues. In order to identify new genes that are associated with glioma, a non-redundant set of 6614 genes that have been previously identified were removed from the starting collection of 59680 probesets on the Affymetrix/Eos-Hu03 GeneChip® array. Genes associated with glioma were selected from the remaining 53005 probesets such that the ratio of "average" glioma to "average" normal adult tissues was greater than or equal to 2.5, and the "average" glioma value was greater than or equal to 50 units (this selects for the most abundant of the up-regulated genes). The "average" glioma level was set to the 94th percentile value amongst various glioblastoma, astrocytoma, and oligodendroglioma specimens; the "average" normal adult tissue level was set to the 85th percentile value amongst various non-malignant organs and tissues and other non-malignant brain tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated. Predicted protein domains are noted.			
70	Pkey:	Unique Eos probeset identifier number		
	ExAccn:	Exemplar Accession number, Genbank accession number		
	UnigeneID:	Unigene number		
	Unigene Title:	Unigene gene title		
	Prot. Doms:	Predicted Protein Domains		
	R1:	glioma vs normal adult tissues		

75	Pkey	ExAccn	UniGene ID	Unigene Title	Protein Domains	R1
	443902	W28470	Hs.12500	N-ethylmaleimide-sensitive factor a		4.0
	441476	R44566	Hs.173134	ESTs		4.0
	446048	AI272364	Hs.182081	KIAA1811 protein		3.8
	407061	X97748		gb:H.sapiens PTX3 gene promoter reg		3.7
80	414323	NM_014759	Hs.334588	KIAA0273 gene product	In3;TM;	3.6
	439769	AA448828	Hs.30598	Homo sapiens mRNA full length inser	lactamase_B,Rhomboid,TPR	3.6
	429319	AI023754	Hs.199068	similar to calcium/calmodulin depen	ptkinase;TM;SS	3.6
	443412	W84893	Hs.9305	angiotensin receptor-like 1		3.5
	425533	T47802	Hs.9305	angiotensin receptor-like 1		3.5

5	408610	AW026692	Hs.285050	ESTs	ion_trans_K_tetra,Kv2chan	3.4
	450678	AL109703	Hs.25314	Homo sapiens mRNA full length inser	Y_phosphatase,ART;TM;SS	3.4
	419171	NM_002846	Hs.89655	protein tyrosine phosphatase, recep		3.4
	445875	AF070524	Hs.13410	Homo sapiens clone 24453 mRNA seque		3.4
	412581	AA224244	Hs.182704	ESTs, Moderately similar to alterna		3.3
	424911	AA984354	Hs.7913	ESTs		3.3
	452753	AA028049	Hs.277728	SEC14 (S. cerevisiae)-like 2	CRAL_TRIO	3.3
	436648	R18856	Hs.352385	ESTs	pkinase,pkinase_C,PMP22_C	3.2
10	452130	AW248349	Hs.28088	SGC32445 protein	TB2_DP1_HVAZZ;TM;SS	3.2
	448848	AF131851	Hs.22241	hypothetical protein		3.2
	426470	AA528794	Hs.128644	ESTs		3.2
	419344	U94905	Hs.277445	diacylglycerol kinase, zeta (104kD)	ank,DAGKa,DAGKc,DAG_PE-ki	3.2
	439783	AI125760	Hs.24835	hypothetical protein FLJ14594	ig_LRR,LRRNT,LRRCT;TM;S	3.2
	411358	R47479	Hs.94761	KIAA1691 protein	TM;SS	3.2
15	409433	AA074382	Hs.135255	ADAMTS14		3.2
	456940	H46986	Hs.31861	ESTs		3.1
	423744	D26158	Hs.1701	ELAV (embryonic lethal, abnormal vi	rm, Gene66;	3.1
	432227	U28389	Hs.274122	erythrocyte membrane protein band 4	VHP;TM;	3.1
	449181	X96783	Hs.23179	synaptotagmin V	C2;TM;SS	3.1
20	422274	NM_015564	Hs.114169	KIAA0416 protein	LRR,LRRNT,LRRCT;TM;SS	3.1
	424607	NM_016848	Hs.151123	neuronal Shc	PID,SH2;	3.1
	416898	BE219510	Hs.234074	Homo sapiens mRNA; cDNA DKFZp761G02	EGF,Rhabd_glycop;TM;SS=	3.1
	438162	NM_014618	Hs.6090	deleted in bladder cancer chromosom	TM;SS	3.1
	439892	AL043463	Hs.6755	RaP2 interacting protein 8	RUN;SS	3.1
25	445330	R52656	Hs.21691	ESTs	7tm_1	3.0
	451768	NM_001406	Hs.26988	ephrin-B3	Ephrin;TM;SS	3.0
	444457	AI204146	Hs.92556	ESTs	Fork_head	3.0
	458247	R14439	Hs.209194	ESTs		3.0
30	424616	U72671	Hs.151250	intercellular adhesion molecule 5,	ig_ICAM_N;TM;SS	3.0
	408971	R38990	Hs.13485	ESTs		3.0
	423940	NM_012429	Hs.277728	SEC14 (S. cerevisiae)-like 2	CRAL_TRIO;TM;	3.0
	458124	AW005548	Hs.124590	ESTs		3.0
	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA seque		3.0
35	444808	H20019	Hs.286084	ESTs	ank,ras,PH,ArfGap,HCO3_co	3.0
	437696	Z83844	Hs.5790	hypothetical protein dJ37E16.5	Hydrolase;TM;	2.9
	424016	AW163729	Hs.6140	hypothetical protein MGC15730	ig;SS	2.9
	421680	AL031186	Hs.289106	Human DNA sequence from clone CTA-9	Collagen;TM;SS	2.9
	418055	R18516	Hs.351299	ESTs, Weakly similar to I38022 hypo	ZZ_ZZ	2.9
40	444819	AI697836	Hs.148433	ESTs		2.9
	420524	AB010575	Hs.98547	amiloride-sensitive cation channel	ASC;TM;	2.9
	416237	H30684	Hs.159863	ESTs		2.9
	432270	AK001008	Hs.274233	Homo sapiens cDNA FLJ10146 fs, clo		2.9
	405569		NM_031481	Homo sapiens sofule carr	mito_carr;TM;SS	2.9
45	428950	BE311879	Hs.194673	phosphoprotein enriched in astrocyt	DED;TM;	2.9
	426128	NM_001471	Hs.167017	gamma-aminobutyric acid (GABA) B re	7tm_3,sushi,ANF_receptor;	2.9
	447758	H17302	Hs.93967	ESTs, Weakly similar to NBHUC8 deco	LRR,LRRNT,LRRCT;TM;SS	2.9
	445331	H04402	Hs.12520	Homo sapiens clone 23568, 23621, 23	PC_rep	2.9
	431010	BE251246	Hs.248214	complexin 1	TM;	2.9
50	433065	N62902	Hs.343660	Homo sapiens PAC clone RP4-651K2 fr	SS	2.9
	426845	AB025186	Hs.172740	microtubule-associated protein, RP1	EB1,C4;TM;	2.9
	454360	L78207	Hs.54470	ATP-binding cassette, sub-family C	ABC_tran,ABC_membrane,PRK	2.9
	438859	AI559626	Hs.93522	Homo sapiens mRNA for KIAA1647 prot	bZIP,X-box,7tm_2,EGF_cadh	2.9
	410515	F12086	Hs.4257	ESTs	PID,SH2,PID,SH2	2.8
55	434022	R18374	Hs.117956	ESTs	hormone_rec,zf-C4	2.8
	428960	AF052224	Hs.194584	bassoon (presynaptic cytomatrix pro	Carla_C4,RPH3A_effector,T	2.8
	426290	AB007918	Hs.169182	KIAA0449 protein	WD40;TM;	2.8
	417287	AI831678	Hs.285714	KIAA1599 protein	C2;TM;	2.8
	422575	AK000546	Hs.118552	hypothetical protein FLJ20539	PTR2;TM;SS	2.8
60	417941	AI056049	Hs.96297	ESTs	Band_41,ERM	2.8
	452707	AI093823	Hs.45070	ESTs		2.8
	424873	AB018294	Hs.153610	KIAA0751 gene product	C2,PDZ;TM;	2.8
	408209	NM_004454	Hs.43697	ets variant gene 5 (ets-related mol	Ets;TM;	2.8
	415935	H09663	Hs.106490	ESTs	PID	2.8
65	437999	AW905038	Hs.90242	ESTs	ion_trans	2.8
	428248	AI126772	Hs.40479	ESTs		2.8
	414001	AI610347	Hs.103812	ESTs, Moderately similar to ALU1_HU	Gelsolin,VHP,p450	2.8
	406634	AA386235	Hs.74576	GDP dissociation inhibitor 1	GDI;TM;	2.8
	453439	AI572438	Hs.32976	guanine nucleotide binding protein	G-gamma;TM;	2.8
70	433320	D60647	Hs.250879	ESTs, Highly similar to CTXN RAT CO	rm	2.8
	420888	AB006713	Hs.100058	dihydropyrimidinase-like 4	Dihydroorotase;TM;	2.7
	440001	AI740721	Hs.128292	ESTs		2.7
	417622	AW298163	Hs.82318	WAS protein family, member 3	WH2;TM;	2.7
	438626	AI198059	Hs.26370	ESTs		2.7
75	404439			ENSP00000067222::Mitochondrial 28S	OLF;SS	2.7
	448375	NM_004644	Hs.21022	adaptor-related protein complex 3,	Adaplin_N;TM;	2.7
	420989	AB002372	Hs.323833	syntrophin	TM;	2.7
	419651	NM_007023	Hs.91971	cAMP-regulated guanine nucleotide e	cNMP_binding,DEP,RasGEF,R	2.7
	414562	AW955734	Hs.112195	ESTs, Weakly similar to 2108402A ca		2.7
	410865	T16342	Hs.66727	ESTs, Weakly similar to T31613 hypo	IRK	2.7
80	421146	AI082215	Hs.97993	ESTs, Moderately similar to SERP1 [		2.7
	419087	AI671245	Hs.24835	hypothetical protein FLJ14594	ig_LRR,LRRNT,LRRCT;TM;S	2.7
	421499	AI271438	Hs.236131	homeodomain-interacting protein kin	pkinase,Pepidase_M1;TM	2.7
	425014	AI251449	Hs.171939	ESTs	PID,PDZ	2.7

448655	AL035289	Hs.21708	hypothetical protein from clone 248	TM;SS	2.7
424410	W79027	Hs.271762	ESTs		2.7
447117	AI362798	Hs.40183	ESTs		2.7
447478	BE618843	Hs.28144	fibronectin type 3 and SPRY domain-	fn3,SPRY;TM;	2.7
437645	R20728	Hs.21164	ESTs		2.7
433698	H24201	Hs.247423	adducin 2 (beta)	Aldolase_0;TM;	2.7
419701	AA248999	Hs.7913	ESTs		2.7
410510	AW294625	Hs.64064	potassium voltage-gated channel, su	cNMP_binding,ion_trans,PA	2.7
452869	AB014534	Hs.30898	KIAA0634 protein	fn3;SS	2.7
428045	T15455	Hs.182231	thyrotropin-releasing hormone	;SS	2.7
425218	NM_014909	Hs.155182	KIAA1038 protein	TM;	2.7
425558	AF040723	Hs.158300	huntingtin-associated protein 1 (ne	TM;	2.6
440789	AB007857	Hs.7416	KIAA0397 gene product	TBC,RUN;TM;	2.6
418423	NM_014732	Hs.301658	KIAA0513 gene product	TM;	2.6
450400	AI694722	Hs.279744	ESTs	lectin_c	2.6
413566	AW604451	Hs.285814	sprouty (Drosophila) homolog 4	SH2,SH3;TM;SS	2.6
443759	BE390832	Hs.134729	FXVD domain-containing ion transpor	ATP1G1_PLM_MAT8;TM;SS	2.6
425069	AA687465	Hs.298184	potassium voltage-gated channel, sh	addo_ket_red	2.6
429291	AF933057	Hs.349189	mannosyl (alpha-1,3)-glycoprotein		2.6
424798	AW016523	Hs.182850	ESTs		2.6
447455	H38335	Hs.6750	Homo sapiens mRNA for FLJ00058 prot	TM;SS	2.6
417212	AW952823	Hs.351547	NS1-binding protein	E2_N,E2_C,DNA_mis_repair,	2.6
432265	BE390832	Hs.285753	SCG10-like-protein	Slathmin;TM;SS	2.6
417005	C21115	Hs.26612	ESTs, Moderately similar to S23650		2.6
421091	W22821	Hs.351612	ribosomal protein L28	TM;	2.6
445472	AB006631	Hs.12784	Homo sapiens mRNA for KIAA0293 gene	homeobox,CUT;TM;	2.6
431967	AJ243653	Hs.373498	organic cation transporter	sugar_ly;TM;SS	2.6
439151	AW135066	Hs.283110	carbonic anhydrase X	carb_anhydrase;TM;SS	2.6
424134	AF070637	Hs.140950	hypothetical protein	DUF176;SS	2.6
430213	AW993446	Hs.235445	hypothetical protein FLJ121313	GRAM;TM;	2.6
445954	AA148926	Hs.27836	hypothetical protein FLJ22362	fn3;TM;	2.6
445084	H38914	Hs.250848	hypothetical protein FLJ14761	TM;SS	2.6
446236	NM_006293	Hs.301	TYRO3 protein tyrosine kinase	fn3,lg,kinase;TM;	2.6
433706	AW947250	Hs.283645	ESTs	PH,RhoGAP	2.6
423606	AB011094	Hs.129892	KIAA0522 protein	PH,bZIP,IQ,Sec7;TM;	2.5
438915	AA280174	Hs.285681	Williams-Beuren syndrome chromosome		2.5
448923	AL034562	Hs.22584	prodynorphin	Opioids_neuropep;SS	2.5
408115	AB033107	Hs.42796	KIAA1281 protein		2.5
446772	AW294404	Hs.144515	Homo sapiens cDNA FLJ11672 fis, clo		2.5
427989	H85525	Hs.40479	gb:yv88h06.r1 Soares melanocyte 2Nb	TM;SS	2.5
435833	BE259178	Hs.41641	Bruno (Drosophila)-like 4, RNA bin	rm;TM;	2.5
423797	BE259364	Hs.132898	fatty acid desaturase 1	heme_1,FA_desaturase;TM	2.5
448277	BE622827	Hs.99486	hypothetical protein FLJ13044	mito_carr;TM;SS	2.5
417298	AW665639	Hs.37958	ESTs		2.5
415577	AF257770	Hs.20930	poly(rC)-binding protein 4	KH-domain;TM;	2.5
420742	U79251	Hs.99902	opioid-binding protein/cell adhesio	ig;TM;SS	2.5
419109	BE169157	Hs.172717	ESTs	kinase,LRRCT,ig,LRR,LRRN	2.5

TABLE 28C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA  
 sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NI\_position: Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NI_position
405569	6006906	Plus	99719-99873
404439	7139680	Plus	55316-55585

TABLE 29A: ABOUT 362 GENES UP-REGULATED IN GLIOMA COMPARED TO NON-MALIGNANT ADULT BRAIN TISSUE

Table 29A lists about 362 genes up-regulated in glioma compared to non-malignant adult brain tissue. These were selected as for Table 28A, except that the ratio of "average" glioma to "average" normal brain was greater than or equal to 3.0, the "average" glioma level was set to the 99th percentile value amongst various glioma specimens, the "average" normal adult tissue level was set to the 90th percentile value amongst various non-malignant adult brain specimens, the "average" glioma value was greater than or equal to 50 units. Predicted protein domains are noted.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 Protein Domains: Predicted Protein Domains  
 R1: glioma vs non-malignant adult brain tissue

Pkey	ExAccn	Unigene ID	Unigene Title	Protein Domains	R1
414477	U41635	Hs.76228	amplified in osteosarcoma	kinase,LRR,TM;SS	11.2
407241	M34516		gb:Human omega light chain protein	TM;	10.9
408972	AL050100	Hs.49378	OKFZP585D0919 protein	TM;	7.0
417512	X76534	Hs.82226	glycoprotein (transmembrane) nmh	PKD;TM;SS	6.9
414001	AI610347	Hs.103812	ESTs, Moderately similar to ALU1_HU	Getsofin,VHP,p450	6.3
428847	AI954833	Hs.98881	ESTs		6.2
407061	X97748		gb:H.sapiens PTX3 gene promoter reg		5.4
440020	AI480204	Hs.177131	ESTs		5.4
408832	AW085690	Hs.63428	ESTs, Weakly similar to Z195_HUMAN		5.3
406837	R70292	Hs.156110	immunoglobulin kappa constant		5.2
407607	NM_001887	Hs.37135	crystallin, beta B1	crystallin;TM;	5.1

435013	H91923	Hs.110024	NM_020142:Homo sapiens NADH:ubiquin	5.1
424916	AW867440	Hs.23096	ESTs	5.1
409659	AW970843	Hs.55682	eukaryotic translation initiation f	5.1
432576	AW157424	Hs.165954	ESTs, Weakly similar to I38022 hypo	5.1
406621	X57809	Hs.181125	immunoglobulin lambda locus	5.1
430418	R98852	Hs.36029	heart and neural crest derivatives	5.1
441633	AW958544	Hs.112242	normal mucosa of esophagus specific	5.0
429707	W76631	Hs.211819	matrix metalloproteinase 238	5.0
438915	AA280174	Hs.285681	Williams-Beuren syndrome chromosome	5.0
441321	H17182	Hs.7771	B-cell associated protein	5.0
406848	A1264844	Hs.275865	ribosomal protein S18	4.9
423505	AF064090	Hs.129708	tumor necrosis factor (ligand) supe	4.8
433848	AF095719	Hs.93764	carboxypeptidase A4	4.8
431882	NM_001426	Hs.271977	engrailed homolog 1	4.8
446295	A1355029	Hs.101660	ESTs, Weakly similar to T14171 atax	4.8
409170	W91994	Hs.18145	ESTs	4.8
421155	H87879	Hs.102267	lysyl oxidase	4.7
409202	AA236881	Hs.51043	hexosaminidase B (beta polypeptide)	4.7
412115	AK001763	Hs.73239	hypothetical protein FLJ10901	4.7
450463	AW952018	Hs.201398	G protein coupled receptor interact	4.7
445960	A1268399	Hs.140489	ESTs, Weakly similar to UN1_HUMAN	4.7
406807	AA057605	Hs.180920	ribosomal protein S9	4.6
409190	AU078538	Hs.50984	sarcoma amplified sequence	4.6
401699			Target Exon	4.6
408901	AK001330	Hs.48855	hypothetical protein FLJ10468	4.6
441669	R78195	Hs.29692	Homo sapiens cDNA FLJ11436 fs, clo	4.6
406868	AA505445	Hs.300697	immunoglobulin heavy constant gamma	4.6
406699	L06505	Hs.182979	ribosomal protein L12	4.6
406663	U24683		immunoglobulin heavy constant mu	4.6
427714	AF119850	Hs.2186	eukaryotic translation elongation f	4.6
407260	L09095		gb:Homo sapiens mRNA fragment	4.5
406803	H42321	Hs.163593	ribosomal protein L18a	4.5
430397	AI924533	Hs.105607	bicarbonate transporter related pro	4.5
414044	BE614194	Hs.75721	profilin 1	4.5
424238	AA337401	Hs.137635	ESTs	4.5
421532	AW138207	Hs.146170	hypothetical protein FLJ22969	4.4
421241	X91817	Hs.102866	transketolase-like 1	4.4
436398	H87136	Hs.5174	ribosomal protein S17	4.4
428479	Y00272	Hs.334562	cell division cycle 2, G1 to S and	4.4
446921	AB012113	Hs.16530	small inducible cytokine subfamily	4.3
433271	BE621697	Hs.14317	nucleolar protein family A, member	4.3
406964	M21305		FGFES predicted novel secreted pro	4.3
432191	AA043193	Hs.273186	hypothetical protein, clone Teletho	4.3
420890	AA434058	Hs.100071	6-phosphogluconolactonase	4.3
413053	AW963283	Hs.65377	ESTs, Moderately similar to KIAA139	4.3
406687	M31126	Hs.352054	matrix metalloproteinase 11 (stroma	4.2
425157	NM_005227	Hs.283007	phospholipid transfer protein	4.2
426388	AA748850	Hs.125830	bladder cancer overexpressed protei	4.2
446490	AK000706	Hs.15125	hypothetical protein FLJ20699	4.2
431750	AA514986	Hs.283705	ESTs	4.2
428327	AW206236	Hs.28773	ESTs	4.2
417342	W40277	Hs.81994	glycophorin C (Gerbich blood group)	4.1
433688	AA628467	Hs.112572	Homo sapiens cDNA FLJ14130 fs, clo	4.1
433170	AB037816	Hs.8982	KIAA1395	4.1
423084	AU076474	Hs.123178	translocase of inner mitochondrial	4.1
407928	AW956382	Hs.59771	ESTs	4.1
445636	AW105401	Hs.350068	ribosomal protein L29	4.1
418689	AJ360883	Hs.375584	hypothetical protein FLJ11029	4.1
450690	AA296696	Hs.333418	FXD domain-containing ion transpor	4.1
419092	J05581	Hs.89603	mucin 1, transmembrane	4.0
447813	AJ394345	Hs.238513	hypothetical protein MGC5442	4.0
436419	AP948626	Hs.171356	ESTs	4.0
458147	AW752597		gb:IL3-CT0214-161299-045-B06 CT0214	4.0
443402	U77846	Hs.356316	elastin (supravalvular aortic steno	4.0
433435	BE545277	Hs.340959	Ta translation elongation factor, m	4.0
413595	AW235215	Hs.16145	ESTs	4.0
412607	Z33642	Hs.74115	immunoglobulin superfamily, member	4.0
419913	AW270040	Hs.34455	ESTs	4.0
415209	F00183	Hs.172004	titin	4.0
439310	AF086120	Hs.102793	ESTs	3.9
421777	BE562088	Hs.108196	HSPC037 protein	3.9
409485	S80990	Hs.252136	foolin (collagen/fibrinogen domain	3.9
402241			Target Exon	3.9
432716	A1762964	Hs.205180	ESTs	3.9
418140	BE613836	Hs.83551	microfibrillar-associated protein 2	3.9
434214	AF119871	Hs.155860	hypothetical protein PRO2268	3.9
406855	AA902829		gb:ok72e06.s1 NC1_CGAP_GCA Homo sap	3.9
421567	AJ272137	Hs.198265	matrix metalloproteinase 25	3.9
403364			Target Exon	3.9
412339	BE161267	Hs.314466	ESTs	3.8
423007	AA320134	Hs.196029	Homo sapiens mRNA for KIAA1657 prot	3.8
427600	AW630918	Hs.179774	proteasome (prosome, macropain) act	3.8
405201			Target Exon	3.8
			rm	5.1
			:SS	5.1
			rm	5.1
			ig,HSP70,Ppx-GppA;TM;SS	5.1
			HLH	5.1
			TM;SS	5.0
			ig,Peptidase_M10;TM;SS+	5.0
			Band_7;TM;	5.0
			Ribosomal_S13;	4.9
			TNF;TM;SS	4.8
			Zn_carpOepI,Propep_M14;T	4.8
			homeobox;TM;	4.8
			UM	4.8
			rm	4.8
			Lysyl_oxidase,Aldose_epim	4.7
			Glyco_hydro_20,Glyco_hydr	4.7
			:SS	4.7
			C1q,Collagen;TM;SS	4.7
			zf-C2H2,bZIP	4.7
			Ribosomal_S4,S4,tRNA_inL	4.6
			transmembrane4;TM;SS	4.6
			TM;	4.6
			TM;	4.6
			ig;TM;	4.6
			Ribosomal_L11;TM;	4.6
			:SS	4.6
			COX8,SHMT,MIF,GST_C,EF1G_	4.6
				4.5
			Ribosomal_L18a;TM;	4.5
			HCO3_cotransp;TM;	4.5
			profilin;TM;	4.5
			TM;SS	4.5
			Armadillo_seg,HEAT;TM;S	4.4
			transketolase,transket_py	4.4
			Ribosomal_S17a,PolyA_pot;	4.4
			pkinese,ICE_p10,ICE_p20;T	4.4
			IL8;SS	4.3
			:	4.3
			ABC1;TM;	4.3
			Glucosamine_iso;TM;	4.3
			TM;	4.3
			hemopexin,Peptidase_M10;T	4.2
			LBP_BPI,CETP.LBP_BPI_CETP	4.2
				4.2
			TM;	4.2
			cpn60_TCP1	4.2
			cystatin,Coprogen_oxidase,	4.2
			TM;	4.1
				4.1
			TM;	4.1
			rm	4.1
			TYA;SS	4.1
				4.1
			filament,GTP_EFTU,EFG_C,G	4.1
			ATP1G1_PLM_MAT8;TM;SS	4.1
			SEA;TM;SS	4.0
			ubiquitin;TM;SS	4.0
			AT_hook,ATHILA	4.0
			PMM	4.0
			PDZ,UM,phkinase	4.0
			EF_TS,UBA;	4.0
			rm	4.0
			ig;TM;SS	4.0
			EPH_1bd,ln3,phkinase,	4.0
				4.0
			casein_kappa,phkinase,ig,n	3.9
			TM;	3.9
			Collagen,fibrinogen_C;TM=	3.9
			p450;TM;SS	3.9
			LRR,UPAR_LY8;TM;	3.9
			TM;SS	3.9
			:SS	3.9
			hemopexin,Peptidase_M10;T	3.9
			SH2_Y_phosphatase	3.9
			tubulin	3.8
			TIMP	3.8
			PA28_alpha,PA28_beta;	3.8
			mito_carr,SH2,SH3,Alpha_a	3.8

5	436906	H95990	Hs.181244	major histocompatibility complex, c	ig.MHC_I;TM;SS	3.8
	407319	A1743332	Hs.257729	ESTs, Moderately similar to ALU7_HU	rm.Upoprotein_2	3.8
	400290	H18836	Hs.31608	hypothetical protein FLJ20041	Cys_knot	3.8
	430240	BE303038	Hs.236547	Homo sapiens, clone IMAGE:2905978,	HEAT_PBS;TM;	3.8
	442487	AF191019	Hs.8361	hypothetical protein, estradiol-ind	LRP_LRRNT;TM;SS	3.8
	408135	AA317248	Hs.42957	methyltransferase-like 1	Methyltransf_4;TM;	3.8
	419942	U25138	Hs.93841	potassium large conductance calcium	CaKB;TM;SS	3.8
	410584	AB011112	Hs.64742	KIAA0540 protein		3.8
10	440676	NM_004987	Hs.112378	LJM and senescent cell antigen-like	LJM;SS	3.8
	406874	AW161706	Hs.180842	ribosomal protein L13	Ribosomal_L13e;SS	3.7
	429249	X81479	Hs.2375	egl-like module containing, mucin-I	7m_2.EGF.GPS,S_locus_gly	3.7
	430799	C19035	Hs.164259	ESTs	FKBP_TPR	3.7
	453099	H62087	Hs.31659	thyroid hormone receptor-associated	WD40;TM;	3.7
15	421794	X86096	Hs.108371	E2F transcription factor 4, p107/p1	E2F_TDP.KOW;Ribosomal_L14	3.7
	444795	A193356	Hs.160316	ESTs	Tropomyosin.ACOX	3.7
	443834	A1741510	Hs.173548	ESTs	CUB.MAM.F5_F8_type_C	3.7
	429731	AK001592	Hs.212172	beta-carotene 15,15'-dioxygenase	RPE65;SS	3.7
	426433	L38969	Hs.169878	thrombospondin 3	TSPN1sp_3.EGF.toxin;TM	3.7
20	426395	BE151985	Hs.355669	hypothetical protein FLJ23316	pkinaase	3.7
	406704	M21665	Hs.929	myosin, heavy polypeptide 7, cardia	myosin_head;IQ;Myosin_tail	3.7
	447860	AF193807	Hs.131835	Rhesus blood group, B glycoprotein	Ammonium_transp.FecCD;TM=	3.7
	430281	A1878842	Hs.237924	CGI-69 protein	mlto_carr/homeobox;TM;S	3.7
	448360	AL117560	Hs.206352	Homo sapiens mRNA; cDNA DKFZp566P23		3.7
25	446057	A1420227	Hs.366053	Trp-p8 transient receptor potential		3.7
	432078	BE314877	Hs.24553	hypothetical protein FLJ12541 simil	TM;SS	3.7
	406854	AA613705	Hs.252259	ribosomal protein S3	KH-domain;Ribosomal_S3_C;	3.7
	422532	AL008726	Hs.118126	protective protein for beta-galacto	serine_carbpepl.GalP_UDP_	3.7
	428171	AA489323	Hs.182825	ribosomal protein L35	Ribosomal_L29;	3.6
30	442285	W28729	Hs.356072	uncharacterized hypothalamus protei		3.6
	411281	BE392782	Hs.4786	Homo sapiens cDNA: FLJ22849 fs, cl	cadherin	3.6
	457657	AW411509	Hs.352567	hypothetical protein PRO2121	UQ_con;TM;	3.6
	414624	BE589320	Hs.23628	3 beta-hydroxy-delta 5-C27-steroid		3.6
	451564	AU076698	Hs.132760	hypothetical protein MGC15729	sugar_tr.Condensation;TM=	3.6
35	445411	AL137255	Hs.12646	hypothetical protein FLJ22693	hormone_rec.zf-CCCH;TM;	3.6
	400785			C11000861:gi19938016[ra]NP_064687.	TM;SS	3.6
	413343	BE392026	Hs.334348	hypothetical protein MGC13045	TM;	3.6
	427380	NM_005534	Hs.177559	interferon gamma receptor 2 (interf	tn3;TM;SS	3.6
	427818	AW511222	Hs.193765	ESTs		3.6
40	449957	D31385	Hs.24220	hypothetical protein	TM;	3.6
	451529	A1917901	Hs.208641	ESTs	actin	3.6
	446528	AU076640	Hs.15243	nucleolar protein 1 (120kD)	Nol1_Nop2_Sun;TM;	3.6
	431659	AA031875	Hs.266940	t-complex-associated-testis-express	Tctex-1;TM;	3.6
	433350	BE563152	Hs.10362	Homo sapiens cDNA: FLJ20944 fs, cl	zf-C3HC4,SPRY	3.6
45	412896	AW804157	Hs.375570	major histocompatibility complex, c	ig.MHC_II_beta;TM;SS	3.6
	441748	R14439	Hs.209194	ESTs		3.6
	406853	AA814553	Hs.252259	hypothetical protein FLJ23059	KH-domain;Ribosomal_S3_C;	3.5
	457464	AW972234	Hs.126680	ESTs		3.5
50	429619	AL120751	Hs.211568	eukaryotic translation initiation f		3.5
	423309	BE006775	Hs.126782	sushi-repeat protein	sushi;MYR;SS	3.5
	438682	AA354489	Hs.375594	EBP50-PDZ interactor of 64 kD		3.5
	453022	AA031499	Hs.118489	ESTs	Amino_oxidase	3.5
	434042	A1589941	Hs.8254	Homo sapiens, Similar to tumor diff		3.5
55	424867	A1024860	Hs.153591	Not56 (D. melanogaster)-like protei	TM;SS	3.5
	417298	AW665639	Hs.37958	ESTs		3.5
	403943			C5000355:gi14503225[ra]NP_000765.1		3.5
	429497	AB028953	Hs.204121	KIAA1030 protein	tn3;TM;	3.5
	426613	U96132	Hs.171280	hydroxycy-Coenzyme A dehydrogenas	adh_short;TM;SS	3.5
60	428343	AL043021	Hs.12705	ESTs	WD40;SS	3.5
	456376	AA683904	Hs.89862	TNFRSF1A-associated via death domai	death;TM;	3.5
	400348	AJ251708	Hs.352588	Target		3.5
	404854			Target Exon	;SS	3.5
	427930	AA417656	Hs.372121	ESTs	serpin;SS	3.5
65	453143	AA382234	Hs.356289	protein tyrosine phosphatase, recep	TM;	3.5
	406806	AW088535	Hs.350108	ribosomal protein, large, P0	WD40;TM;	3.5
	406793	AW264291	Hs.5662	guanine nucleotide binding protein		3.5
	414525	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fs, clo		3.5
	419950	AK001645	Hs.93871	hypothetical protein FLJ10783	Glyco_hydro_47;TM;SS	3.5
70	404243			NM_006778:Homo sapiens ring finger	zf-C3HC4,zf-B_box;TM;SS	3.4
	424611	NM_001421	Hs.151139	E74-like factor 4 (ets domain trans	Ets;SS	3.4
	432831	A1821702	Hs.115959	ESTs, Weakly similar to I38022 hypo		3.4
	413943	AW294416	Hs.144687	Homo sapiens cDNA FLJ12981 fs, clo	TM;	3.4
	418558	AW082266	Hs.85131	Fas (TNFRSF6)-associated via death	death;DED;SS	3.4
	408930	AA146721	Hs.334686	hypothetical protein FLJ21588	CUE;TM;	3.4
75	403246			Target Exon	HMG_box;SS	3.4
	416330	AU077101	Hs.79222	galactosidase, beta 1	Glyco_hydro_35;TM;SS	3.4
	404864			NM_025204:Homo sapiens hypotheica		3.4
	441384	AA447849	Hs.288660	Homo sapiens cDNA: FLJ21182 fs, cl	7m_3	3.4
	430284	A1693534	Hs.293196	ESTs		3.4
80	433669	AL047879	Hs.194251	ESTs, Weakly similar to ALU2_HUMAN	RNA_pol_LRNA_pol_L,RasGA	3.4
	456050	R79445	Hs.76230	ribosomal protein S10	S10_plectin;TM;	3.4
	422311	AF073515	Hs.114948	cytokine receptor-like factor 1	tn3;TM;	3.4
	408909	AW502034	Hs.287379	ESTs, Weakly similar to T26022 hypo		3.4
	428028	U52112	Hs.182018	interleukin-1 receptor-associated k	death,kinase;TM;	3.4

	424213	BE390125	Hs.143187	hypothetical protein	DEAD_helicase_C;TM;	3.4
	416432	BE391767	Hs.79322	glutamyl-tRNA synthetase	Ribosomal_S9;	3.4
	400233			Eos Control	TM;SS	3.4
5	403252			Target Exon		3.4
	409433	AA074382	Hs.135255	ADAMTS14	mm,PABP;TM;	3.4
	426053	U68105	Hs.172182	poly(A)-binding protein, cytoplasmic	TM;	3.4
	448222	AI648587	Hs.20725	Mov10 (Moloney leukemia virus 10, m	OPRZZ;TM;	3.4
	432982	AA531058	Hs.182248	truncated calcium binding protein	FBPase;TM;	3.4
10	453914	NM_000507	Hs.574	fructose-1,6-bisphosphatase 1	pyr_redox;TM;SS	3.4
	444626	AA320893	Hs.117062	hypothetical protein FLJ14497	NF;TM;	3.4
	427751	AF000152	Hs.355816	conserved gene amplified in osteosar	mito_carr;TM;	3.4
	416971	R34657	Hs.80658	uncoupling protein 2 (mitochondrial	ank	3.4
	428046	AW812795	Hs.337534	ESTs, Moderately similar to I38022	Myosin_tail	3.4
15	456575	AW063659	Hs.191649	ESTs	IBR	3.4
	407368	AF026942	Hs.17518	gb:Homo sapiens cig33 mRNA, partial	pkinase,DAG_PE-bind,RBD;T	3.4
	414738	L24038	Hs.77183	v-rat murine sarcoma 3611 viral onc	Glyco_hydro_39;SS	3.3
	456356	M74715	Hs.89560	iduronidase, alpha-L-		3.3
	429668	AA626142	Hs.179991	ESTs, Weakly similar to S28942 prot	EGF_ank,notch,metalithio,E	3.3
20	404913			NM_024408:Homo sapiens Notch (Dros	IRF;SS	3.3
	426059	BE292842	Hs.166120	interferon regulatory factor 7	Ph;SS	3.3
	451619	AA018854	Hs.353196	glutathione peroxidase 3 (plasma)		3.3
	410225	AW608964	Hs.12030	ESTs		3.3
	402534			Target Exon		3.3
25	433750	H15448	Hs.31330	Homo sapiens clone HQ0319	GLFV_dehydrog,GLFV_dehydr	3.3
	421712	AK000140	Hs.107139	hypothetical protein	TM;SS	3.3
	433333	AJ016521	Hs.71816	v-ski murine thymoma viral oncogene	pkinase,PH,pkinase_C	3.3
	424915	RA2755	Hs.23096	ESTs	mm	3.3
	408494	AA554714	Hs.187578	Homo sapiens cDNA FLJ11639 fis, clo		3.3
30	445084	H38914	Hs.250848	hypothetical protein FLJ14761	TM;SS	3.3
	448478	AI950021	Hs.370306	ESTs	TM;	3.3
	425274	BE281191	Hs.155462	minichromosome maintenance deficien	MCM;TM;	3.3
	456655	AJ376738	Hs.111179	secreted protein, acidic, cysteine-	kazal;SS	3.3
	438912	AF085843		gb:Homo sapiens full length insert		3.3
35	428396	U70539	Hs.184161	exostoses (multiple) 1	Exostosis;TM;SS	3.3
	437546	AW074836	Hs.173984	T-box 1	T-box,WD40;TM;	3.3
	410693	BE044206		gb:ho40c08.x1 Soares_NFL_T_GBC_S1 H	C1q,Collagen,cystati	3.3
	414961	U27268	Hs.927	myosin-binding protein H	tn3,ig;TM;	3.3
	422766	AA334108	Hs.159572	heparan sulfate (glucosamine) 3-O-s		3.3
40	426120	AA325243	Hs.166887	copine I	C2,mm;TM;	3.3
	452383	T70900	Hs.27189	ESTs	zf-C2H2,PRK	3.3
	456799	AC004923	Hs.135187	unc93 (C. elegans) homolog B	TM;	3.3
	409227	AA806165	Hs.130323	Homo sapiens, clone IMAGE:3960432,	NA;NA	3.3
	432659	AA281633	Hs.278586	KIAA1108 protein	TBC;TM;	3.3
45	448997	AA130330	Hs.25549	hypothetical protein FLJ20898	TM;SS	3.3
	448990	AI354717	Hs.223908	ESTs	transmembrane4	3.3
	437259	AI377755	Hs.120695	ESTs	MHC_I, alpha, ig	3.3
	423461	AB020527	Hs.128827	solute carrier family 17 (sodium ph	sugar_tr;TM;	3.3
50	421563	NM_006433	Hs.105806	granulysin	;SS	3.3
	453804	AA300204	Hs.35276	KIAA0852 protein	TM;	3.3
	428810	AF068236	Hs.193788	nitric oxide synthase 2A (inducible	NAD_binding,flavodoxin,FA	3.3
	453933	AI452933	Hs.65377	ESTs	EF_TS,UBA,transmembr	3.3
	449267	AI638640	Hs.220624	ESTs		3.3
	418165	RA5959	Hs.6637	ESTs	mito_carr	3.3
55	446673	NM_016361	Hs.15871	LPAP for lysophosphatidic acid phos	acid_phosphat;TM;SS	3.3
	402475			ubiquitin specific protease 18		3.2
	404233			Target Exon	HIT	3.2
	406655	M21533	Hs.277477	major histocompatibility complex, c	ig,MHC_I;TM;SS	3.2
	414556	AW975063	Hs.343443	ribosomal protein L36	Ribosomal_L36e;	3.2
60	450191	AW137243	Hs.248074	ESTs	homeobox;TM;	3.2
	435906	AI686379	Hs.110796	SAR1 protein	arLras;TM;	3.2
	412540	C18341	Hs.73999	thyroid hormone receptor interactor	SH3,FCH;SS	3.2
	422562	AI962060	Hs.118397	AE-binding protein 1	Zn_carbOpept,F5_FB_type_C	3.2
	431051	AA481143	Hs.283374	ESTs, Weakly similar to CA15_HUMAN	TM;	3.2
65	407984	AW134708	Hs.243569	ESTs		3.2
	441494	AW452344	Hs.129977	ESTs		3.2
	423114	AU076497	Hs.1614	cholinergic receptor, nicotinic, al	Neur_chan_LBD,Neur_chan_m	3.2
	419833	AA251131	Hs.220697	ESTs	WHEP-TRS,(RNA-synt)_1b,non	3.2
	419036	T80967	Hs.372603	gb:yd23f12.s1 Soares fetal liver sp		3.2
70	431222	X56777	Hs.273790	zona pellucida glycoprotein 3A (spe	zona_pellucida;TM;SS	3.2
	453094	AA740928	Hs.27356	ESTs		3.2
	426989	AI815206	Hs.367644	ESTs	BAG,ubiquitin	3.2
	445033	AV652402	Hs.72901	cyclin-dependent kinase inhibitor 2	ank;	3.2
	446272	BE268912	Hs.14601	hematopoietic cell-specific Lyn sub	SH3,HS1_rep;TM;	3.2
75	438930	AW843633	Hs.343261	hypothetical protein AL110115	HLH	3.2
	438183	BE263252	Hs.6101	hypothetical protein MGC3178	thioled;TM;	3.2
	421310	AW630087	Hs.103315	trinucleotide repeat containing 1	PHD	3.2
	409293	R02673	Hs.110156	ESTs		3.2
	407115	AA084921	Hs.76230	ribosomal protein S10	S10_plectin;TM;	3.2
80	401174			Target Exon	transmembrane4,EF_TS,UBA	3.2
	400217			Eos Control	ras;SS	3.2
	408876	AI815189	Hs.57475	sex comb on midleg homolog 1		3.2
	418245	AA088767	Hs.83883	transmembrane, prostate androgen in	TM;SS	3.2
	403694			Target Exon	UDPGT	3.2



414265	BE410411	Hs.75864	endoplasmic reticulum glycoprotein		3.2
451118	AJ852096	Hs.60640	ESTs	EGF,vnc,TIL;SS	3.2
422624	BE616678	Hs.76152	KDEL (Lys-Asp-Glu-Leu) endoplasmic	ER_lumen_recept	3.2
437388	AL355586	Hs.14478	Homo sapiens mRNA; cDNA DKFZp762H18		3.2
429150	AF120103	Hs.197366	smoothed (Drosophila) homolog	COX8,SHMT,MIF,GST_C,EF1G_	3.2
430379	AF134149	Hs.240395	potassium channel, subfamily K, mem	ion_trans;TM;SS	3.2
434956	BE266566	Hs.4288	hypothetical protein DKFZp434K046	Cullin;TM	3.2
422166	W72424	Hs.112405	S100 calcium-binding protein A9 (ca	ethand,S_100;TM;	3.2
452493	AJ904031	Hs.106826	KIAA1696 protein	PHD,Myc-LZ,DC1,AT_hook;TM	3.2
413100	BE065208		gb:RC1-BT0314-310300-015-b09 BT0314		3.2
420764	BE250676	Hs.19928	hypothetical protein SP329	F-box;TM;	3.2
421680	AL031186	Hs.289106	Human DNA sequence from clone CTA-9	Collagen;TM;SS	3.2
406738	AA587983		gbnj30b09.a1 NC_CGAP_AA1 Homo sap	TIM,Ribosomal_SS;TM;SS=	3.1
434288	AW189075	Hs.116265	fibrillin3	EGF,granulin,TB,EB,TIL;TM	3.1
438264	T88773	Hs.6133	calpain 5	Calpain_III,Peptidase_C2	3.1
436819	AA731746	Hs.120232	ESTs	rm	3.1
459298	R86701		gb:ym86d09.r1 Soares adult brain N2	TM;	3.1
452127	BE562126	Hs.28081	eukaryotic translation initiation I	rm,7tm_1,SNF;TM;	3.1
422305	AJ928242	Hs.293438	ESTs, Highly similar to AF198488 1		3.1
414393	AA146855		gb:zo41h10.r1 Stratagene endothelia		3.1
423369	BE219099	Hs.279513	ESTs		3.1
429457	BE243065	Hs.202955	hypothetical protein FLJ20507	Cys-protease-3C;TM;	3.1
409124	AW252609	Hs.50727	N-acetylglucosaminidase, alpha- (Sa	TM;SS	3.1
429615	AF258627	Hs.211562	ATP-binding cassette, sub-family A	ABC_tran;TM;SS	3.1
445519	AJ635202	Hs.170132	hypothetical protein FLJ22494	TM;	3.1
410007	AW950887	Hs.57813	zinc ribbon domain containing, 1	TFIIS;TM;	3.1
407228	M25079	Hs.155378	hemoglobin, beta	globin;TM;	3.1
411573	AB029000	Hs.70823	KIAA1077 protein	Sulfatase;TM;	3.1
406654	M90686	Hs.73885	HLA-G histocompatibility antigen, c	Ig,MHC_I;TM;SS	3.1
435072	AW592176	Hs.116932	ESTs	zf-RanBP,MDM2	3.1
456642	AW451623	Hs.109752	putative c-Myc-responsive	;SS	3.1
445457	AF168793	Hs.12743	cameline O-octanoyltransferase	Carn_acyltransf;TM;	3.1
448389	AW188950	Hs.345838	ESTs	2OG-Fell_Oxy,rm,SH3,ras	3.1
458248	BE407379	Hs.108082	ESTs, Weakly similar to T13636 hypo	C1q,Collagen;TM;SS	3.1
451310	AW250651	Hs.26213	Human DNA sequence from clone RP3-4	TM;	3.1
414688	AJ750246	Hs.76901	for protein disulfide isomerase-rel	thiorel;SS	3.1
428797	AA496205	Hs.193700	Homo sapiens mRNA; cDNA DKFZp586103	LIM,Ran_BP1,GRIP,TPR,pro_	3.1
425067	BE223071	Hs.169142	ESTs		3.1
410639	BE269047	Hs.65234	hypothetical protein FLJ20596	DEAD,helicase_C,PRKAIIP3;	3.1
413011	AW068115	Hs.821	biglycan	LRR,LRRNT;SS	3.1
421502	AF111856	Hs.105039	solute carrier family 34 (sodium ph	Ribosomal_L20,Na_Pi_cotra	3.1
447164	AF026941	Hs.17518	vitamin; similar to inflammatory r	MoaA,MiB_PogE;TM;	3.1
414907	X90725	Hs.77697	polo (Drosophila)-like kinase	Ribosomal_L37aa,kinase,P	3.1
418613	AA744529	Hs.86575	mitogen-activated protein kinase ki	kinase,CNH;TM;	3.1
408734	AJ565616		gb:lo16h12.x1 NC_CGAP_U12 Homo sap		3.1
410188	AL096739	Hs.107260	hypothetical protein DKFZp586H0623	Ricin_B_lectin,Glycos_tra	3.1
437959	AW72068	Hs.375604	KIAA1856 protein	elF5_elF2B,W2;TM;	3.1
406764	AA429825	Hs.343443	ribosomal protein L38	Ribosomal_L36a;	3.1
406637	U14966	Hs.180946	ribosomal protein L5	Ribosomal_L18p;	3.1
451080	H41082	Hs.271783	ESTs		3.1
414875	H42679	Hs.77522	major histocompatibility complex, c	Ig,MHC_II_alpha;TM;SS	3.1
416365	U15131	Hs.79265	suppression of tumorigenicity 5	DENN,dDENN,uDENN;TM;SS=	3.1
400261			Eos Control	Ig,MHC_II_beta;TM;SS	3.1
412270	AC005262	Hs.73797	guanine nucleotide binding protein	G-alpha_arf;TM;	3.1
456843	BE301883	Hs.152707	glioblastoma amplified sequence	:	3.1
443071	AL080021	Hs.8986	complement component 1, q subcomp	C1q,Collagen;SS	3.1
426196	BE272095	Hs.167791	reticulocalbin 1, EF-hand calcium b	ethand;SS	3.1
424010	AL080188	Hs.137558	Homo sapiens mRNA; cDNA DKFZp434A13	cadherin;TM;SS	3.1
439975	AW328081	Hs.6817	inosine triphosphatase (nucleoside	Hamp_1p_like;TM;	3.1
450761	R75930	Hs.174838	Homo sapiens cDNA FLJ14192 fs, clo		3.1
418322	AA284166	Hs.84113	cyclin-dependent kinase inhibitor 3	Y_phosphatase,DSPE;TM;S	3.1
432395	AW295956	Hs.11900	hypothetical protein FLJ14972	Xlink.zf-CCCH,G_patch,non	3.1
407904	W44735	Hs.107260	Homo sapiens cDNA: FLJ21278 fs, cl		3.1
452500	AW373011	Hs.54558	hypothetical protein FLJ22222		3.1
432171	AJ202503	Hs.343661	ESTs, Weakly similar to ALU8_HUMAN	WD40	3.1
416768	AA363733	Hs.1032	regenerating islet-derived 1 alpha	lectin_c;TM;SS	3.1
442492	AA529489	Hs.234518	ribosomal protein L23	Ribosomal_L14;	3.0
421210	U80016	Hs.102598	mucosal vascular addressin cell adh	TM;SS	3.0
439429	AF150288		gb:AF150286 Human mRNA from cd34 st	RA,Band_7,MBQAT	3.0
447463	AW378665	Hs.18625	Mitochondrial Acyl-CoA Thioesterase	Acyl-CoA_hydro;TM;	3.0
448352	AA337951	Hs.20991	SET domain, bifurcated 1	AhpC-TSA,SET,MBD;TM;SS=	3.0
428291	AA534009	Hs.183487	interferon stimulated gene (20kD)		3.0
445669	AJ570830	Hs.174870	ESTs		3.0
452862	AW378065	Hs.8687	ADAMTS2 (a disintegrin-like and me	Pep_M12B_propep,isp_1,Rep	3.0
430069	AJ219293	Hs.293660	Homo sapiens, clone IMAGE:3535476,	SPRY,zf-B_box,zf-C3HC4;TM	3.0
451028	AA021258	Hs.123073	ESTs		3.0
446021	BE389213	Hs.286	ribosomal protein L4	Ribosomal_L4;TM;	3.0
434652	AF148713	Hs.125830	bladder cancer overexpressed protei	WD40,DUF6;	3.0
425829	AL133079	Hs.134126	crystallin, gamma S	crystall;TM;	3.0
424909	S78187	Hs.153752	cell division cycle 25B	Rhodanese;SS	3.0
423579	NM_004121	Hs.1675	gamma-glutamyltransferase-like acti	G_glu_transpept;TM;SS	3.0
444652	BE513613	Hs.11538	actin related protein 2/3 complex,	WD40;TM;	3.0
441283	AA927670	Hs.131704	ESTs	CUB,MAM,F5_F8_type_C	3.0

437415	AL137400	Hs.306456	pre-mRNA processing factor 18	Band_41.hormone2,Prp18:TM	3.0				
444542	AI161293	Hs.280380	aminopeptidase	NAD_binding,Evodioxin,FA	3.0				
442426	AJ373062	Hs.332938	hypothetical protein MGC5370	zf-RanBP,MDM2	3.0				
447910	AL137679	Hs.20000	Homo sapiens mRNA; cDNA DKFZp434D24	Exonuclease;SS	3.0				
426858	NM_004182	Hs.172791	ubiquitously-expressed transcript	DUF232;SS	3.0				
445417	AK001058	Hs.12680	a disintegrin-like and metalloprote	bsp_1,Reprolysin,Pep_M12B	3.0				
430482	AF131810	Hs.241545	hypothetical protein	TM;SS	3.0				
427661	AA410292	Hs.104761	ESTs	wml	3.0				
451876	T63141		gb:yb99a1.2a1 Stratagene lung (9372	SH3	3.0				
453862	AL137493	Hs.35945	Homo sapiens mRNA; cDNA DKFZp434B12	lg;TM;	3.0				
452965	AI904779	Hs.247525	Human DNA sequence from clone RP11-	C2,PHD,RPH3A_effector,zf-	3.0				
441455	AJ271871	Hs.7854	zinc/iron regulated transporter-like	Zp;TM;SS	3.0				
452600	AB910842	Hs.103381	ESTs	Exo_endo_phos	3.0				
450775	AA902384	Hs.73853	bone morphogenetic protein 2	TGFb_propeptide,TGF-beta,	3.0				
417634	W27202	Hs.82327	glutathione synthetase	GSH_synthase;TM;	3.0				
415152	W22644	Hs.278712	Homo sapiens cDNA FLJ11074 fs, clo		3.0				
410093	AW589558	Hs.299883	ESTs, Weakly similar to KIAA0970 pr		3.0				
412404	AW075995	Hs.86228	TRIAD3 protein		3.0				
443466	BE243123	Hs.321045	IKK-related kinase epsilon; inducib	kinase,RIO1;TM;	3.0				
TABLE 29B:									
Pkey:		Unique Eos probeset identifier number							
CAT number:		Gene cluster number							
Accession:		Genbank accession numbers							
Pkey	CAT Number	Accession							
458147	1030220_1	AW848781 AW848490 AW849062 AW752597 AW752699							
406855	0_0	AA902829							
400233	11259_1	BC004324 NM_001020 BC007977 M06854 BM050628 BG289809 BE385504 BG744451 BI826914 BE440007 BI260656 BE395117 BE389334 BE255792 BI194169 BI668218 BI194376 BG716213 BG714408 BE392513 AV722219 AW328077 BM241171 BI828267 AW958606 BG831252 BE392943 BE394033 BI858915 BI668334 BE621019 BG706995 BE791985 BF967484 BI193635 BG761859 BM466537 BG747165 BG827488 AI133550 BM011511 BI227282 BG489212 BG478388 BE727789 BI160880 BG831707 BG324692 BM470427 BI083889 BG831605 BG754114 BG420536 BF308210 BE384213 BG832271 BG828032 BG481641 BF205675 BE899041 BE271558 BI193807 BI159866 BG473786 BG391718 BI194428 BI117210 BG768326 BG759507 BF975645 BF343657 BM020598 BG831082 BG829943 BG829501 BF306557 BE562511 BM050145 BM017978 BI193934 BI160764 BI160371 BG754991 BF973348 BF663234 BF032537 BE388168 BM009051 BI192794 BG831002 BG830459 BG764737 BG761808 BG481705 BG104314 BM454565 BI261500 BG831857 BG831684 BG829852 BG765030 BG760419 BG760268 BG749762 BG480900 BG419627 BG248771 BF975542 BM042233 BI161149 BG831302 BG830033 BG829626 BM050084 BI193014 BI161360 BG827279 BG110091 BG106500 BI258369 BG831982 BM458301 BM019513 BI161350 BI114178 BG481969 BG474870 BF974048 BF971122 BE741405 BE395269 BG832027 BG831469 BG490895 BM413638 BG943529 BG831012 BG829471 BG686284 BG337575 BG336551 BF206677 BI258301 BI160946 BG105893 BF183072 BM459542 BI193881 BG832043 BG831323 BI194545 BI160968 BG755930 BG706018 BE743865 BM465145 BG831227 BG774290 BF683451 BE907161 BM045391 BI194396 BI161269 BG747091 BG546643 BF984863 BI160206 BI226402 BI226338 AW328236 BG339458 BF972634 BE909808 BI160988 BI160251 BG828764 BG826860 BG758360 BF568228 BI818282 BI457127 BG831491 BG759864 AI830010 BF568381 BE907238 BI161172 BI161773 BG827153 BG825088 BG335419 BG109404 AI929068 BE906354 BE408564 BM045000 BG339617 BG282794 BG335767 BE907263 BF568921 BG829961 BG479305 BG260397 AI922228 BE301975 AW516055 BG480919 BG480626 AW196817 BG336261 BE906157 BE395717 BG391427 BI192954 BG829757 BG476379 BE301536 BE394727 BE257695 BE905344 AI433577 BE894416 BE888992 BE409223 BF034756 BE904077 BG830888 BE909153 BE907998 BE395767 AI871751 BE744523 BI192663 BG831669 AI000225 BE743836 BE272515 AA628078 BM463802 BE393375 BE393033 AW170187 BE730961 BE395410 BE744572 BE392297 BE391448 BE390780 BE388821 BE258477 BE905970 BE901567 BE898833 BE880326 BF726889 BE910504 BE390753 BE390131 AA650542 BE744156 BE394125 BE742207 BE395265 BE392942 BE894336 BE378222 BE906926 BE904650 BE393704 BE620999 BE515162 BE378753 BE272370 BE907458 BE612601 BE392484 BE907636 BE907353 BE910491 BE909796 BE905331 AW248173 AI683576 BE908826 BE620180 BF037570 BE908312 BE615015 BE256977 BE746875 BE394133 BE391478 BE910068 BE907185 BE742109 AA995746 BE561195 BE908825 BE906472 BE906509 BE906017 BE910442 BE514657 BI261969 BE741707 BE392216 BM042783 BF570283 BI262119 BE395707 BE378298 AW327827 BE394422 BF569178 BE263240 AI700512 BG830290 BF569308 BF569156 BI194587 BE390831 BG745096 AI681675 BE395674 AA138372 BE279892 AA442822 BE384898 AA313519 AI878866 AA305904 F33366 BE394852 F29153 F33618 AI133637 AA300009 F34063 F29455 AU099691 AI905085 AI906656 AA343249 BE388691 AW404280 AA379888 F29022 BF089981 F31013 F24305							
438912	4071_1					AF085843 R70623 R70523			
410693	1054267_1					BE044206 AW797320 BE161676 AW797356 AW797352			
413100	1490226_1					BE065224 BE065168 BE065313 BE065208			
406738	0_0					AA587983			
459298	90831_2					AL157855 BF802216 R86701 BF802224 R84600 BF356151 BG982935			
414393	15833_3					AL532972 BI092731 AI765546 AA393801 AI129669 AI393538 AW519008 AA432598 AW295856 AI650941 AI470541 AL550388 AA146856 AI074762 BE895187 AA393867 BI052082			
406734	0_0					AI565616 AI190141			
400261	23110_1					BC006097 X03066 NM_002120 M26040 AW469119 AW469127 AI299772 AW518149 AI144456 AW628070 AI629032 AI358810 AI880433 AI440472 AI357070 AI865365 AW014799 AI767973 AW518041 AA909398 AW768606			
439429	452694_1					AF150286 AV739062 AA835857			
451876	2328579_1					T63141 AI821021 BF370092 BF370127 BF370060 T62998			
TABLE 29C:									
Pkey:						Unique number corresponding to an Eos probeset			
Ref:						Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.			
Strand:						Indicates DNA strand from which exons were predicted.			
NL_position:						Indicates nucleotide positions of predicted exons.			
Pkey	Ref					Strand	NL_position		
401699	3176654					Minus	33285-34084		
402241	7690131					Minus	125073-125206,130996-131125		
403364	8571785					Plus	120351-120465		
405201	7230116					Plus	36934-37314		
400785	8131682					Plus	43113-43967		
403943	7711864					Plus	100742-100904,101322-101503		
404854	7143420	Plus	14260-14537						

404243	5672609	Plus	74695-75123
403246	7637831	Minus	143547-143854,143741-143900
404884	5263010	Plus	94495-94681,95055-95195,97396-97506,9760
403252	7677983	Plus	102214-102692
404913	7341740	Plus	97717-97976
402534	9801061	Plus	58989-59457
402475	7547191	Plus	65363-65725
404233	8218045	Minus	84791-85123
401174	9438414	Minus	132847-133917
403694	7107765	Plus	142925-143080,165505-166186,167486-16763

TABLE 30A: ABOUT 282 GENES UP-REGULATED IN GLIOMA COMPARED TO NON-MALIGNANT ADULT BRAIN TISSUES THAT ARE LIKELY TO ENCODE EXTRACELLULAR OR CELL-SURFACE PROTEINS

15	Table 30A lists about 282 genes up-regulated in glioma compared to non-malignant adult brain tissues that are likely to encode extracellular or cell-surface proteins. These were selected as for Table 28A, except that the ratio of "average" glioma to "average" normal adult tissues was greater than or equal to 4.0, the "average" glioma level was set to the 99th percentile value amongst various glioma specimens, the "average" normal adult brain tissue level was set to the 75th percentile value amongst various non-malignant brain tissues, the "average" glioma value was greater than or equal to 50 units (this selects for the most abundant of the up-regulated genes), and the predicted protein contained a structural domain that is indicative of extracellular localization (e.g. ig, fn3, efg, 7tm domains, signal sequences, transmembrane domains). Predicted protein domains are noted.
20	PKey: Unique Eos probe/identifier number ExAccn: Exemptor Accession number, Genbank accession number UniGeneID: UniGene number UniGene Title: UniGene gene title Protein Domains: Predicted Protein Domains R1: glioma vs. non-malignant adult brain tissues likely to encode extracellular or cell-surface proteins

30	PKey	Accession	UniGene ID	UniGene Title	Protein Domains	R1
	406868	AA505445	Hs.300697	immunoglobulin heavy constant gamma	Ig;TM;	37.6
	407241	M34516		gb:Human omega light chain protein	TM;	22.7
	414477	U41635	Hs.76228	amplified in osteosarcoma	kinase,LRR;TM;SS	22.7
	417512	X76534	Hs.82226	glycoprotein (transmembrane) nmb	PKD;TM;SS	15.4
	406803	H42321	Hs.163593	ribosomal protein L18a	Ribosomal_L18ae;TM;	14.2
	429707	W76631	Hs.211819	matrix metalloproteinase 238	Ig;Peptidase_M10;TM;SS=	12.8
	419092	J05581	Hs.89603	mucin 1, transmembrane	SEA;TM;SS	12.8
35	414738	L24038	Hs.77183	v-rat murine sarcoma 3511 viral onc	kinase,DAG_PE-bind,RBD,T	12.4
	441384	AA447849	Hs.288660	Homo sapiens cDNA: FLJ22182 fls, cl	7tm_3:none	11.6
	406621	X57809	Hs.181125	immunoglobulin lambda locus	Ig;HSP70,Ppx-GppA;TM;SS	11.0
	410584	AB011112	Hs.64742	KIA0540 protein	none	11.0
40	426395	BE151985	Hs.355669	hypothetical protein FLJ23316	kinase:none	10.7
	425184	BE278288	Hs.155048	Lutheran blood group (Aubergier b an	Ig;TM;SS	10.7
	430379	AF134149	Hs.240395	potassium channel, subfamily K, mem	ion_trans;TM;SS	10.3
	408972	AL050100	Hs.49378	DKFZP586D0919 protein	TM;	9.9
	446921	AB012113	Hs.16530	small inducible cytokine subfamily	IL8;SS	9.9
45	452862	AW378065	Hs.8687	ADAMTS2 (a disintegrin-like and me	Pep_M12B_propep,bsp_1,Rep	9.7
	418101	ALD47476	Hs.296310	gap junction protein, alpha 4, 37kD	connexin;TM;SS	8.5
	400290	H18936	Hs.31608	hypothetical protein FLJ20041	Cys_knot	8.4
	401699			Target Exon	TM;	8.1
	423309	BE006775	Hs.126782	sushi-repeat protein	sushi;HYR;SS	8.1
50	427600	AW630918	Hs.179774	proteasome (prosome, macropain) act	PA28_alpha,PA28_beta;	7.9
	436906	H95990	Hs.181244	major histocompatibility complex, c	Ig,MHC_I;TM;SS	7.8
	425335	BE394327	Hs.296267	folistatin-like 1	efhand,kazal,ar,ras,7tm_	7.7
	413011	AW068115	Hs.821	biglycan	LRR,LRRNT;SS	7.7
	446295	A1355029	Hs.101680	ESTs, Weakly similar to T14171 atax	UM	7.7
55	436398	H87136	Hs.5174	ribosomal protein S17	Ribosomal_S17e,PolyA_pot	7.6
	435013	H91923	Hs.110024	NM_020142:Homo sapiens NADH:ubiquin	none	7.4
	431809	A1623488	Hs.333488	Homo sapiens, clone IMAGE:3603998,	TM;SS	7.4
	424608	X80695	Hs.151134	oxidase (cytochrome c) assembly 14	60KD_IMP;TM;	7.3
	438560	AA481690	Hs.300697	immunoglobulin heavy constant gamma	Ig	7.3
60	429297	X82494	Hs.198862	fibulin 2	EGF_ANATO,TIL_spider toxin	7.3
	450463	AW952018	Hs.201398	G protein coupled receptor interact	C1q,Collagen;TM;SS	7.2
	417342	W40277	Hs.81994	glycophorin C (Gerbich blood group)	TM;	7.2
	414688	A1750246	Hs.76901	for protein disulfide isomerase-rel	thiorel;SS	7.2
	414044	BE614194	Hs.75721	profilin 1	profilin;TM;	7.1
65	404864			NM_025204*:Homo sapiens hypothetica	:	7.1
	452127	BE562126	Hs.28081	eukaryotic translation initiation I	rm,7tm_1,SNF;TM;	7.0
	412115	AK001763	Hs.73239	hypothetical protein FLJ10901	:SS	7.0
	409826	AW501112	Hs.353013	hypothetical protein FLJ23412	none	6.9
	434343	AW956705	Hs.3804	DKFZP564C1940 protein	Idl_recept,ar;TM;	6.9
70	427714	AF119850	Hs.2186	eukaryotic translation elongation I	COX8,SHMT,MIF,GST_C,EF1G_	6.9
	437259	AJ377755	Hs.120695	ESTs	MHC_II_alpha,Ig,none	6.9
	429212	NM_001504	Hs.198252	G protein-coupled receptor 9	7tm_1;TM;	6.8
	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A re	Neur_chan_LBD,Neur_chan_m	6.8
	423505	AF064090	Hs.129708	tumor necrosis factor (ligand) supe	TNF;TM;SS	6.8
75	413053	AW963263	Hs.65377	ESTs, Moderately similar to KIAA139	TM;	6.7
	430542	A1557486	Hs.119122	ribosomal protein L13a	Ribosomal_L13,LACT,ar,ra	6.7
	435906	A1686379	Hs.110796	SAR1 protein	ar,ras;TM;	6.6
	429307	AU078592	Hs.198951	jun B proto-oncogene	bZIP;TM;	6.4
80	437388	AL359586	Hs.14478	Homo sapiens mRNA: cDNA DKFZp762H18	none	6.4
	415714	NM_002290	Hs.78672	laminin, alpha 4	laminin_EGF,laminin_G,Tro	6.3
	406733	AA976565	Hs.297753	vimentin	filament,bZIP,Apolipoprot	6.3
	411296	BE207307	Hs.10114	growth suppressor 1	2OG-Fell_Oxy;TM;SS	6.3
	441321	H17182	Hs.7771	B-cell associated protein	Band_7;TM;	6.3
	444637	T19101	Hs.11494	fibulin 5	EGF,TIL;SS	6.3

5	413731	BE243845	Hs.75511	connective tissue growth factor	Cys_knotLsp_1.vwc,IGF8P;	6.2
	422901	R81936	Hs.374568	ribosomal protein L44	sushi:none	6.2
	430397	A924533	Hs.105607	bicarbonate transporter related pro	HCO3_cotransp;TM;	6.1
	429630	M85289	Hs.211573	heparan sulfate proteoglycan 2 (per	EGF,Ig,laminin_B,laminin_	6.1
	434867	AF159442	Hs.103382	phospholipid scramblase 3	SAPA,Scramblase;TM;SS	6.1
	431449	M55994	Hs.256278	tumor necrosis factor receptor supe	TNFR_c6;TM;SS	6.1
	440678	NM_004987	Hs.112378	UIM and senescent cell antigen-like	UIM;SS	6.0
	424658	NM_002406	Hs.151513	mannosyl (alpha-1,3)-glycoprotein	GNT-4,Glycos_transf_2;TM=	5.9
10	439310	AF086120	Hs.102793	ESTs	casein_kappa,kinase,Ig,n	5.9
	410169	A1373741	Hs.59384	hypothetical protein MGC3047	Ig;TM;	5.8
	423007	AA320134	Hs.196029	Homo sapiens mRNA for KIAA1657 prot	TIMP:none	5.8
	414265	BE410411	Hs.75864	endoplasmic reticulum glycoprotein	none	5.8
	427715	BE245274	Hs.180428	KIAA1181 protein	TM;	5.8
15	409220	BE243323	Hs.51233	tumor necrosis factor receptor supe	TNFR_c6,death,Lipoprotein	5.8
	450690	AA286696	Hs.333418	FXYD domain-containing ion transpor	ATP1G1_PLM_MAT8;TM;SS	5.8
	433848	AF095719	Hs.93764	carboxypeptidase A4	Zn_carbOpept,Procep_M14;T	5.7
	446404	AA019961	Hs.28216	LOC50627	none	5.7
	441641	A1650417	Hs.247068	ESTs, Moderately similar to ALU8_HU	Pterin_4a,fibrinogen_C,Co	5.7
20	418875	W19971	Hs.233459	ESTs	Xlink:none	5.7
	424748	AA346257	Hs.134933	ESTs	none	5.7
	439737	A1751438	Hs.41271	Homo sapiens collagen, type VIII, a	C1q,Collagen:none	5.7
	448950	AF288687	Hs.9275	CGI-152 protein	E1-E2_ATPase,Hydrolase;TM	5.6
	406654	M90686	Hs.73885	HLA-G histocompatibility antigen, c	Ig,MHC_I;TM;SS	5.6
	423084	AU076474	Hs.123178	translocase of inner mitochondrial	mm	5.6
25	402241			Target Exon	p450;TM;SS	5.6
	425157	NM_006227	Hs.283007	phospholipid transfer protein	LBP_BPI_CETP,LBP_BPI_CETP	5.6
	428343	AL043021	Hs.12705	ESTs	WD40;SS	5.6
	447990	BE048821	Hs.20144	small inducible cytokine subfamily	IL8;SS	5.6
30	412607	Z33642	Hs.74115	immunoglobulin superfamily, member	Ig;TM;SS	5.5
	447625	AW505364	Hs.19074	LATS (large tumor suppressor, Dros	kinase,kinase_C,UBA,Pol	5.5
	408056	AA312329	Hs.42331	ephrin-A4	Ephrin;TM;SS	5.5
	445960	A1268399	Hs.140489	ESTs, Weakly similar to UN1_HUMAN	zf-C2H2,bZIP:none	5.5
	406874	AW161706	Hs.180842	ribosomal protein L13	Ribosomal_L13e;SS	5.4
35	418558	AW082266	Hs.86131	Fas (TNFRSF6)-associated via death	death,DED;SS	5.4
	414638	W03516	Hs.76698	stress-associated endoplasmic retic	TM;SS	5.4
	409190	AU076536	Hs.50984	sarcoma amplified sequence	transmembrane4;TM;SS	5.4
	429150	AF120103	Hs.197366	smoothed (Drosophila) homolog	COX8,SHMT,MIF,GST_C,EF1G_	5.3
	453099	H62087	Hs.31659	thyroid hormone receptor-associated	WD40;TM;	5.3
40	414443	AU077268	Hs.76144	platelet-derived growth factor rece	Ig,kinase;TM;	5.3
	441283	AA927670	Hs.131704	ESTs	CUB,MAM,F5_F8_type_C:none	5.3
	414249	A1797994	Hs.279929	qp25L2 protein	Sulfotransfer,EMP24_GP25L	5.3
	451154	AA015879	Hs.33536	ESTs	TIMP:none	5.2
	406655	M21533	Hs.277477	major histocompatibility complex, c	Ig,MHC_I;TM;SS	5.2
45	406656	M16714	Hs.89643	major histocompatibility complex, c	transketolase,transket_py	5.2
	449224	AW995911	Hs.299883	hypothetical protein FLJ23399	hn3;TM;	5.2
	422562	A1962060	Hs.118397	AE-binding protein 1	Zn_carbOpept,F5_F8_type_C	5.2
	436127	W94824	Hs.11565	RIKEN cDNA 2010100012 gene	TM;SS	5.2
	428327	AW206236	Hs.28773	ESTs	cystatin,Coprogen_oxidase,	5.2
50	427080	AW068287	Hs.301175	ras-related C3 botulinum toxin subs	res;TM;	5.2
	414624	BE389320	Hs.23628	3 beta-hydroxy-delta 5-C27-steroid	none	5.2
	430281	A1878842	Hs.237924	CGI-69 protein	mito_carr,homocysteine;TM;S	5.2
	426433	L38959	Hs.169875	thrombospondin 3	TSPN,isp_3,EGF,toxin;TM	5.1
	432716	A1762964	Hs.205180	ESTs	LRR,UPAR_LV6;TM;	5.1
55	451564	AU076698	Hs.132760	hypothetical protein MGC15729	sugar_tr,Condensation;TM=	5.1
	409340	BE174629	Hs.321130	hypothetical protein MGC2771	aa_permeases,pyridoxal_de	5.1
	432680	T47384	Hs.278613	interferon, alpha-inducible protein	TM;SS	5.1
	404913			NM_024408: Homo sapiens Notch (Dros	EGF,ank,notch,metalhoio,E	5.1
60	409485	S80990	Hs.252136	ficollin (collagen/fibrinogen domain	Collagen,fibrinogen_C;TM=	5.1
	432078	BE314877	Hs.24553	hypothetical protein FLJ12541 simil	TM;SS	5.1
	406687	M31126	Hs.352054	matrix metalloproteinase 11 (stroma	hemopexin,Peptidase_M10;T	5.1
	423712	W46802	Hs.81968	disabled (Drosophila) homolog 2 (mi	PID,MACPF,kil_recept_at,ts	5.0
	441595	AW206035	Hs.356457	ESTs	sugar_tr:none	5.0
	450435	A1695975	Hs.201805	ESTs	EGF,laminin_B,laminin_EGF	5.0
65	443177	BE268461	Hs.202	benzodiazepine receptor (peripheral	TspO_MBR;TM;SS	5.0
	433435	BE545277	Hs.340959	Ts translation elongation factor, m	EF_TS,UBA;	5.0
	426386	AA748850	Hs.125830	bladder cancer overexpressed protei	none	5.0
	419913	AW270040	Hs.34455	ESTs	EPH_Ibd,fn3,kinase,	5.0
	446696	AF279265	Hs.298476	solute carrier family 26, member 6	Sulfate_transp,STAS,xen_u	5.0
70	448997	AA130390	Hs.25549	hypothetical protein FLJ20898	TM;SS	5.0
	413891	BE271020	Hs.355753	tumor suppressor deleted in oral ca	none	5.0
	453143	AA382234	Hs.356289	protein tyrosine phosphatase, recep	serpin;SS	5.0
	448249	AW855331	Hs.337124	ESTs	carb_anhydrase,UCH-1,UCH-	5.0
	412819	T25829	Hs.24048	FK506 binding protein precursor	FKBP;TM;SS	5.0
75	426059	BE292842	Hs.166120	interferon regulatory factor 7	IRF;SS	5.0
	432285	BE091049	Hs.343665	ribosomal protein S15a	Ribosomal_S8,RNase_PH,KH-	5.0
	412540	C18341	Hs.73999	thyroid hormone receptor interactor	SH3,FCH;SS	5.0
	414465	AW270645	Hs.76194	ribosomal protein S5	Ribosomal_S7;	5.0
	456655	A1376736	Hs.111779	secreted protein, acidic, cysteine-	kazal;SS	5.0
80	421794	X86096	Hs.108371	E2F transcription factor 4, p107/p1	E2F_TDP,KOW,Ribosomal_L14	4.9
	444824	AA843575	Hs.12056	asialoglycoprotein receptor 1	lecIn_c,Tropomyosin;TM	4.9
	438278	BE409248	Hs.57988	hypothetical protein FLJ22357 simil	TFIS,RNA_POL_M_15KD,UPF0	4.9
	418140	BE613836	Hs.83551	microbrillar-associated protein 2	TM;SS	4.9
	429457	BE243065	Hs.202955	hypothetical protein FLJ20507	Cys-protease-3C;TM;	4.9

449475	AJ348027	Hs.108557	hypothetical protein PP1057	transmembrane4;TM;SS	4.9
425274	BE281191	Hs.155462	minichromosome maintenance deficien	MCN4;TM;	4.9
442110	AF113008	Hs.8102	ribosomal protein S20	Ribosomal_S10;TM;	4.9
415209	F00183	Hs.172004	titin	none	4.9
451849	AJ199261	Hs.27191	hypothetical protein from clone 247	TM;	4.9
421567	AJ272137	Hs.198265	matrix metalloproteinase 25	hemopexin;Peptidase_M10;T	4.9
427380	NM_005534	Hs.177559	interferon gamma receptor 2 (interf	h3;TM;SS	4.9
431303	AW241605	Hs.253928	ESTs	none	4.9
432396	AW295956	Hs.11900	hypothetical protein FLJ14972	Xen;zf-CCCH,G-patch,non	4.9
415021	RS4409	Hs.301693	Homo sapiens, clone IMAGE:3638994,	none	4.8
430498	X02910	Hs.241570	tumor necrosis factor (TNF superfam	TNF;TM;SS	4.8
449957	D31365	Hs.24220	hypothetical protein	TM;	4.8
419603	BE262579	Hs.91568	PLB protein	OMPdecase;TM;SS	4.8
427588	L25081	Hs.179735	ras homolog gene family, member C	ras,none	4.8
421502	AF111856	Hs.105039	solute carrier family 34 (sodium ph	Ribosomal_L20,Na_Pt_cotra	4.8
404854			Target Exon	:SS	4.7
411261	BE392792	Hs.4786	Homo sapiens cDNA: FLJ22849 fs, cl	cadherin	4.7
414045	NM_002951	Hs.75722	ribophorin II	gpdh,gpdh_C,plli_assembly	4.7
431830	Y16645	Hs.271387	small inducible cytokine subfamily	IL8;SS	4.7
412896	AW804157	Hs.375570	major histocompatibility complex, c	Ig,MHC_II_beta;TM;SS	4.7
429305	AF095727	Hs.287832	myosin protein zero-like 1	Ig,transmembrane4;TM;SS	4.7
451698	Y16187	Hs.26880	endothelin converting enzyme-like 1	Peptidase_M13;TM;	4.7
422687	AW068823	Hs.119206	insulin-like growth factor binding	zf-C2H2,Ig,none	4.7
444542	AJ161293	Hs.260380	aminopeptidase	NAD_binding,flavodoxin,FA	4.7
429833	NM_012079	Hs.268627	diacylglycerol O-acyltransferase (m	ACAT;TM;	4.7
456376	AA663904	Hs.89862	TNFRSF1A-associated via death domai	death;TM;	4.7
438568	RS8865	Hs.11135	major histocompatibility complex, c	MHC_II_alpha,Ig,none	4.7
456356	M74715	Hs.89560	lduronidase, alpha-L-	Glyco_hydro_39;SS	4.7
420486	AF036365	Hs.98303	caveolin 3	Caveolin;TM;	4.6
425123	AW205274	Hs.154695	phosphomannomutase 2	PMM;SS	4.6
439512	AA118287	Hs.58093	Homo sapiens, clone IMAGE:3163559,	laminin_EGF;TM;	4.6
418424	Y13622	Hs.85087	latent transforming growth factor b	EGF,TB,spider toxin,granul	4.6
433350	GE563152	Hs.10362	Homo sapiens cDNA: FLJ20944 fs, cl	zf-C3HC4,SPRY,none	4.6
426559	AA281633	Hs.278586	KIAA1108 protein	TBC;TM;	4.6
445417	AK001058	Hs.12680	a disintegrin-like and metalloprote	tsp_1,Reprolysin,Pop_M12B	4.6
437408	AL359598	Hs.35606	Homo sapiens mRNA; cDNA DKFZp547B08	none	4.6
427349	AA360154	Hs.177415	Finkel-Biskis-Reilly murine sarcoma	ubiquitin;TM;	4.6
418918	X07871	Hs.89476	CD2 antigen (p50), sheep red blood	Ig;TM;SS	4.6
421310	AW630087	Hs.103315	trinucleotide repeat containing 1	PHD	4.6
427969	NM_001963	Hs.2230	epidermal growth factor (beta-uroga	EGF,IgI_receptL_b,EB;TM;	4.6
447660	AF193807	Hs.131835	Rhesus blood group, B glycoprotein	Ammonium_transp,FecCD;TM=	4.6
418916	BE392781	Hs.89474	ADP-ribosylation factor 6	arf,ras;TM;	4.6
425720	AA362394	Hs.293984	hypothetical protein MGC13102	TM;SS	4.6
419942	U25138	Hs.93841	potassium large conductance calcium	CaKb;TM;SS	4.6
403105			Target Exon	ISK_Channel;TM;SS	4.6
418067	AJ127968	Hs.83393	cystatin E/M	cystatin;SS	4.6
427863	AF189712	Hs.181002	MLL septin-like fusion	GTP_CDC;TM;	4.5
458147	AW752597		gb:IL3-CT0214-161299-045-B06 CT0214	PMM,none	4.5
456799	AC004923	Hs.135187	unc93 (C.elegans) homolog B	TM;	4.5
427136	AL117415	Hs.173718	a disintegrin and metalloproteinase	Ig	4.5
458766	AW183618	Hs.55610	solute carrier family 30 (zinc tran	Cation_efflux;TM;SS	4.5
445033	AV652402	Hs.72901	cyclin-dependent kinase inhibitor 2	ank;	4.5
441281	BE501247	Hs.144084	ESTs	Collagen,C4,none	4.5
439720	AJ935202	Hs.31181	Homo sapiens cDNA: FLJ23230 fs, cl	SDF_sugar_tr	4.5
410184	AW503667	Hs.59545	ring finger protein 15	SPRY,zf-B_box,zf-C3HC4;TM	4.5
431760	NM_005317	Hs.268531	granzyme M (lymphocyte met-ase 1)	trypsin;TM;SS	4.5
446990	AJ354717	Hs.223908	ESTs	transmembrane4	4.5
407366	AF026942	Hs.17518	gb:Homo sapiens cig33 mRNA, partial	IBR	4.5
426156	BE244537	Hs.167382	natriuretic peptide receptor A/guan	ANF_receptor,guanylate_cy	4.5
442941	AU076728	Hs.8887	cysteine-rich, angiogenic inducer,	Cys_knot,tsp_1,vwc,IgFBP;	4.5
451118	AJ862096	Hs.60640	ESTs	EGF,vwc,TIL;SS	4.5
457657	AW411509	Hs.352567	hypothetical protein PRO2121	UQ_con;TM;	4.4
437016	AU076916	Hs.5398	guanine monophosphate synthetase	PHD,SET,zf-CXXC,EGF,ank,n	4.4
429497	AB028953	Hs.204121	KIAA1030 protein	fn3;TM;	4.4
444090	S69115	Hs.10306	natural killer cell group 7 sequenc	PMP22_Claudin;TM;SS	4.4
454005	AF039237	Hs.288600	hypothetical protein MGC3123	TM;SS	4.4
412270	AC005262	Hs.73797	guanine nucleotide binding protein	G-alpha,arf;TM;	4.4
406729	AA069711		gb:zm52b11.a1 Stratagene fibroblast	filament,bZIP,Apolipoprot	4.4
404610			Homo sapiens cDNA FLJ11027 fs, cl	EGF,laminin_B,laminin_EGF	4.4
422311	AF073515	Hs.114948	cytokine receptor-like factor 1	fn3;TM;	4.4
406973	M34996	Hs.198253	major histocompatibility complex, c	Ig,MHC_II_alpha;TM;SS	4.4
407186	D11747	Hs.177415	Finkel-Biskis-Reilly murine sarcoma	ERG4_ERG24,none	4.4
404243			NM_006778:Homo sapiens ring finger	zf-C3HC4,zf-B_box;TM;SS	4.4
443834	AJ741510	Hs.173548	ESTs	CUB,MAM,F5_FB_type_C,none	4.4
446057	AJ420227	Hs.366053	Trp-p8 transient receptor potential	none	4.4
413661	AA071146	Hs.343354	ribosomal protein L18	Ribosomal_L18e,L15;TM;S	4.4
414875	M42679	Hs.77522	major histocompatibility complex, c	Ig,MHC_II_alpha;TM;SS	4.4
439730	AF035292	Hs.6654	KIAA0657 protein	fn3;Ig;	4.3
406257			Target Exon	7tm_1,none	4.3
434025	AF114264	Hs.216381	Homo sapiens clone HH409 unknown mR	Ig;TM;	4.3
414961	U27266	Hs.927	myosin-binding protein H	fn3;Ig;TM;	4.3
430265	L36033	Hs.237358	stromal cell-derived factor 1	IL8;SS	4.3
429249	X81479	Hs.2375	egf-like module containing, mucin-I	7tm_2,EGF,GPS,S_locus_gly	4.3

433541	AW081538	Hs.220324	hypothetical protein FLJ13052	NAD_kinase;TM;	4.3
400575			NM_022146:Homo sapiens neuropeptide	7tm_1;TM;SS	4.3
427661	AA410292	Hs.104761	ESTs	wil,None	4.3
452056	AW955065	Hs.101150	Homo sapiens, clone IMAGE:4054156,	TM;	4.3
433669	AL047879	Hs.194251	ESTs, Weakly similar to ALU2_HUMAN	RNA_pol_L,RNA_pol_L,RasGA	4.3
422624	BE616678	Hs.76152	KDEL (Lys-Asp-Glu-Leu) endoplasmic	ER_lumen_recept,none	4.3
421680	AL031186	Hs.289106	Human DNA sequence from clone CTA-9	Collagen;TM;SS	4.3
422766	AA334108	Hs.159572	heparan sulfate (glucosamine) 3-O-s	none	4.3
437596	AA761490	Hs.351250	ESTs, Moderately similar to S65657	pkase,WD40	4.3
419285	D31887	Hs.89868	KIAA0062 protein	Zip;TM;SS	4.3
453082	H18835	Hs.31608	hypothetical protein FLJ20041	Ion_trans;TM;SS	4.2
410693	BE044206		gb:ho40c08.x1 Soares_NFL_T_GBC_S1 H	C1q, Collagen, cystati	4.2
413100	BE065208		gb:RC1-BT0314-310300-015-b09 BT0314	none	4.2
432497	AA551104		ESTs, Moderately similar to ALUC_HU	none	4.2
423041	BE170842	Hs.123059	chloride channel Kb	CBS,voltage_CLC;TM;SS	4.2
449799	AI143466	Hs.125060	ESTs	none	4.2
438472	AW974907	Hs.86228	TRIAD3 protein	none	4.2
432179	X75208	Hs.2913	EphB3	EPH_bdb,3,phkase,SAMT	4.2
424488	AK000413	Hs.149227	hypothetical protein FLJ20406	Xlink,xf-CCOH,G-patch;TM=	4.2
406809	AF000574	Hs.22405	leukocyte immunoglobulin-like recep	Ig_Gemini_mov;TM;SS	4.2
407588	Z37544	Hs.37121	phospholipase C, beta 3 (phosphatid	C2,PI-PLC-Y,PI-PLC-X;TM	4.2
407228	M25079	Hs.155376	hemoglobin, beta	globin;TM;	4.2
450900	H61005	Hs.37902	ESTs	none	4.2
410188	AL096739	Hs.107260	hypothetical protein DKFZp586H0623	Ricin_B_lectin,Glycos_tra	4.2
458248	BE407379	Hs.108082	ESTs, Weakly similar to T31636 hypo	C1q, Collagen;TM;SS	4.2
403138			NM_006056:Homo sapiens G protein-co	7tm_1,HECT;TM;SS	4.2
432074	AA525248	Hs.149723	ESTs	Y_phosphatase,none	4.2
438682	AA354489	Hs.375594	EBP50-PDZ interactor of 64 kD	none	4.2
401908			C17000154:gij12003980 gb AAG43830.1	TM;SS	4.2
451287	AK002158	Hs.26194	likely homolog of mouse immunity-as	TM;	4.2
407904	W44735	Hs.107260	Homo sapiens cDNA: FLJ21278 fs, cl	none	4.1
403694			Target Exon	UDPGT-	4.1
423461	AB020527	Hs.128827	solute carrier family 17 (sodium ph	sugar_tr;TM;	4.1
425603	U52219	Hs.158329	G protein-coupled receptor 50	7tm_1;TM;SS	4.1
421485	AA243499	Hs.104800	hypothetical protein FLJ10134	TM;SS	4.1
414509	AW161311	Hs.76294	CD63 antigen (melanoma 1 antigen)	transmembrane4;TM;SS	4.1
423313	NM_014269	Hs.126838	a disintegrin and metalloproteinase	disintegrin,Reprolysin,Pe	4.1
432171	AI202503	Hs.343661	ESTs, Weakly similar to ALUB_HUMAN	WD40	4.1
434652	AF148713	Hs.125830	bladder cancer overexpressed protei	WD40,DUF6;	4.1
429592	AB029041	Hs.209646	KIAA1118 protein	Tropotin,Exo_endo_phos,IQ	4.1
432982	AA531058	Hs.182248	truncated calcium binding protein	OPR_ZZ;TM;	4.1
424867	AJ024860	Hs.153591	Not56 (D. melanogaster)-like protei	TM;SS	4.1
441455	AJ271671	Hs.7854	zinc-finger regulated transporter-like	Zip;TM;SS	4.1
400785			C11000861:gij993601 ref NP_084687.	TM;SS	4.1
447232	AW499834	Hs.327	interleukin 10 receptor, alpha	TM;SS	4.1
450785	AA852713	Hs.108885	Homo sapiens, alpha-1 (VI) collagen	wra, Collagen;TM;SS	4.1
424027	AW337575	Hs.201591	ESTs	7tm_2,HRM,none	4.1
435857	AF253468	Hs.3736	delta-like 4 homolog (Drosophila)	EGF_DSLEB;TM;SS	4.1
437118	AB037857	Hs.300591	CD9 partner 1	none	4.1
411410	R20693	Hs.69954	laminin, gamma 3	laminin_B,laminin_EGF,lam	4.1
413902	AU076743	Hs.75613	CD36 antigen (collagen type I recep	E2F_TDP,CD36;SS	4.1
428938	AC002425	Hs.194660	ceroid-lipofuscinosis, neuronal 3,	CLN3;TM;SS	4.1
453094	AA740928	Hs.27356	ESTs	none	4.1
440811	BE384713	Hs.74655	ESTs, Weakly similar to T34482 hypo	hormone_rec,xf-C4,none	4.0
407287	AJ578812	Hs.345139	gb:tu59d08.x1 NCI_CGAP_Gas4 Homo sa	ras,cadherin	4.0
428028	U52112	Hs.182018	Interleukin-1 receptor-associated k	death,phkase;TM;	4.0
428469	BE549205	Hs.184488	Not2in 2	none	4.0
423114	AU076497	Hs.1614	cholinergic receptor, nicotinic, al	Neur_chan_LBD,Neur_chan_m	4.0
428858	NM_004182	Hs.172791	ubiquitously-expressed transcript	DUF232;SS	4.0
444626	AA320893	Hs.117062	hypothetical protein FLJ14497	pyr_redox;TM;SS	4.0

TABLE 30B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Pkey	CAT Number	Accession
458147	1030220_1	AW848781 AW848490 AW849062 AW752597 AW752699
406729	0_0	AA069711
410693	1054267_1	BE044206 AW797320 BE161878 AW797356 AW797352
413100	1490226_1	BE065224 BE065168 BE065313 BE065208
432497	852_71	AW874688 R94134 AA551104 AA777322 AI033094 BE247143

TABLE 30C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NI\_position: Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NI_position
401699	3176654	Minus	33285-34084
404864	5263010	Plus	94495-94661,95055-95195,97396-97508,9760

402241	7690131	Minus	125073-125206,130996-131125
404913	7341740	Plus	97717-97976
404854	7143420	Plus	14260-14537
403105	8980016	Minus	145287-145744
404610	9588566	Minus	89583-89725,90402-90555,91428-91673
404243	5672609	Plus	74695-75123
406257	7417784	Plus	55821-56037
400575	9886575	Plus	131603-132095
403138	9211494	Minus	164684-165068,167757-168651
401908	8698760	Minus	126888-127024
403694	7107765	Plus	142925-143080,165505-166186,167486-16763
400785	8131682	Plus	43113-43967

# TABLE 31A: ABOUT 189 GENES DOWN-REGULATED IN GLIOMA COMPARED TO NON-MALIGNANT ADULT BRAIN TISSUE

Table 31A lists about 189 genes down-regulated in glioma compared to non-malignant adult brain tissue. These were selected as for Table 30A, except that the numerator was set to the 90th percentile amongst various non-malignant brain specimens, the denominator was set to the 90th percentile value amongst various gliomas, the numerator was greater than or equal to 50 units, and the ratio was greater than or equal to 2.5 (i.e. 2½-fold downregulation in brain tumor vs. normal brain).

PKey: Unique Ecos probe/identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UniGeneID: UniGene number  
 UniGene Title: UniGene gene title  
 Protein Domains: Predicted Protein Domains  
 R1: non-malignant adult brain tissue vs. glioma

PKey	ExAccn	UniGene ID	UniGene Title	Protein Domains	R1
412524	AA417813	Hs.44208	hypothetical protein FLJ23153	F420_oxidoreduct;TM;SS	14.5
432874	W94322	Hs.279651	melanoma inhibitory activity	SH3;TM;SS	8.3
452669	AA216383	Hs.262958	hypothetical protein DKFZp434B044	SCP,LCCL;TM;SS	8.2
426300	U15979	Hs.169228	della-like homolog (Drosophila)	EGF,laminin_EGF;TM;SS	8.2
447990	BE048821	Hs.20144	small inducible cytokine subfamily	IL6;SS	7.3
439477	W69813	Hs.58042	ESTs, Moderately similar to GFR3_HU	GDNF,TPR	7.1
411602	U01406	Hs.767	growth hormone releasing hormone re	7m_2,HRM;TM;SS	6.1
417067	AJ001417	Hs.81086	solute carrier family 22 (extraneur	sugar_tr;TM;SS	6.0
426488	X03350	Hs.4	alcohol dehydrogenase 18 (class I),	adh_zinc;TM;	5.9
447656	NM_003726	Hs.19126	src kinase-associated phosphoprotei	SH3,PH;TM;	5.3
436950	L05779	Hs.113	epoxide hydrolase 2, cytoplasmic	abhydrolase,Hydrolase;TM=	5.2
406837	R70292	Hs.156110	immunoglobulin kappa constant		4.9
410387	AJ277367	Hs.47094	ESTs		4.8
432855	AF017988	Hs.279565	secreted frizzled-related protein 5	Fz,NTR;TM;SS	4.7
441499	AW298235	Hs.101689	ESTs		4.6
421481	AW391972	Hs.104696	KIAA1324 protein	TM;SS	4.5
420255	NM_007269	Hs.1298	membrane metallo-endopeptidase (neu	Peptidase_M13;TM;SS	4.5
407230	AA157857	Hs.182265	keratin 19	filament,bZIP;SS	4.4
412445	X51362	Hs.73893	dopamine receptor D2	7m_1;TM;SS	4.3
413968	AA133935	Hs.173704	ESTs, Moderately similar to A53959		4.2
415165	AW887604	Hs.78065	complement component 7	kd_recept_a,sushi,isp_1,	4.2
420103	AA382259	Hs.95197	aldehyde dehydrogenase 1 family, me	aldedh;TM;	4.2
426723	AW003069	Hs.183850	ESTs	GNT-1;TM;SS	4.1
409081	AJ010277	Hs.50403	T-box 19	T-box;TM;	4.0
407142	AA412535		gb:z199b10.s1 Soares_testis_NHT Hom	Na_sulph_symp;TM;	4.0
414449	AA557660	Hs.76152	decorin	LRRNT,LRR,LRR,LRRNT	4.0
444784	O12485	Hs.11951	ectonucleotide pyrophosphatase/phos	Somatostatin_B,Endonuclease	3.9
420321	D78761	Hs.96657	hypothetical protein	isp_1;SS	3.8
401700			Target Exon	TM;	3.8
418807	NM_004944	Hs.88646	deoxyribonuclease I-like 3	Exo_endo_phos;TM;SS	3.8
406746	AA580395	Hs.279860	tumor protein, translationally-cont	TCTP;TM;	3.7
449077	AW262836	Hs.252844	ESTs		3.7
415718	F30631	Hs.200237	ESTs	isoamylase_N	3.7
402449			Target Exon	phkinase,LRR,LRRCT;TM;SS	3.6
457489	AI693815	Hs.127179	cryptic gene	TM;SS	3.6
406743	AA911569	Hs.279860	tumor protein, translationally-cont	TCTP;TM;	3.6
416950	AL049798	Hs.80552	dermatopontin		3.6
451554	AI474866	Hs.193237	ESTs		3.6
440708	AF038962	Hs.7381	voltage-dependent anion channel 3	Euk_porin,Enterotoxin_A,P	3.5
426095	AJ278023	Hs.89986	ESTs	WD40_none	3.5
406742	AI468091	Hs.279860	tumor protein, translationally-cont	TCTP;TM;	3.5
429343	AK000785	Hs.199480	Homo sapiens, Similar to epsin 3, c	VHS,ENTH,UIM;SS	3.4
439457	AF086274		gb:Homo sapiens full length insert		3.4
408796	AA688292	Hs.170345	ESTs	hormone_rec,zf-C4	3.4
440659	AF134160	Hs.7327	claudin 1	PMP22_Claudin;TM;SS	3.4
415042	NM_006759	Hs.77837	UDP-glucose pyrophosphorylase 2	UDPGP;SS	3.4
417967	BE244373	Hs.11119	nuclear receptor subfamily 4, group	hormone_rec,zf-C4_none	3.3
445234	AW137636	Hs.146059	ESTs	14-3-3_none	3.3
430511	BE018156	Hs.2575	calpain 1, (mu/I) large subunit	efhand,Peptidase_C2_Calpa	3.3
420485	AF218586	Hs.288835	cell death-inducing DFFA-like effec	7m_1,CIDE-N;TM;SS	3.3
413687	AI522318	Hs.103819	ESTs	TM;SS	3.3
428928	BE409838	Hs.194657	cadherin 1, type 1, E-cadherin (epi	cadherin,Cadherin_C_term,	3.3
409738	BE222975	Hs.56205	insulin induced gene 1		3.3
442046	AA974575	Hs.287385	ESTs	zf-C2H2,SET;TM;	3.2
413127	BE066529		gb:RC3-BT0333-300300-017-a12 BT0333		3.2
428350	AJ754634	Hs.131987	ESTs	MAM;TM;	3.2
427980	AA418305	Hs.303205	EST	LRR_none	3.2

424498	AB033043	Hs.149377	hypothetical protein DKFZp761L0424	AIP3;TM;SS	3.2
435684	NM_001290	Hs.4980	UM domain binding 2	UM_bind;TM;	3.2
402632			Target Exon	lg;TM;SS	3.1
431130	NM_006103	Hs.2719	HE4: epididymis-specific, whey-acid	wap;TM;SS	3.1
410636	AA088177	Hs.172870	ESTs	TM;SS	3.1
452658	N88604	Hs.30212	thyroid receptor interacting protei	PC1;TM;	3.1
453180	N46243	Hs.110373	ESTs. Highly similar to T42626 secr	laminin_G,LRRTC,none	3.1
430319	AI480214	Hs.356075	ninjurin 2	TM;SS	3.1
438424	AI912498	Hs.25895	hypothetical protein FLJ14996	C2;TM;	3.1
456063	NM_006744	Hs.76461	retinol-binding protein 4, intersti	lipocatin,TGF-beta,TGFb_p	3.1
429798	AL117578	Hs.222909	DKFZP434C128 protein	TM;	3.1
417677	NM_016055	Hs.82389	CG1-118 protein		3.1
443792	AI763073	Hs.204873	ESTs		3.1
445861	BE293423	Hs.11809	single lg IL-1R-related molecule	TIR;TM;	3.1
407815	AW373860	Hs.183860	hypothetical protein FLJ20277	LRN,none	3.1
456689	NM_002251	Hs.117780	potassium voltage-gated channel, de	ion_trans,K_tetra;TM;SS	3.1
446492	AW205115	Hs.161287	ESTs	SPRY,zf-B_box,PAAD_D	3.1
427706	AW971225	Hs.293800	ESTs, Weakly similar to ALU1_HUMAN		3.0
458008	AA809314	Hs.123295	ESTs	SCAN,zf-C2H2,none	3.0
449708	AI694598	Hs.202126	ESTs		3.0
410132	NM_003480	Hs.300946	Microfibril-associated glycoprotein	TM;SS	3.0
423778	Y09267	Hs.132821	flavin containing monooxygenase 2	FMO-4a,pyr_redox;TM;S	3.0
425280	U31519	Hs.1872	phosphoenolpyruvate carboxylase 1	PEPCK;TM;	3.0
453177	AW389509	Hs.223747	ESTs	zf-C2H2,none	3.0
416781	AF072928	Hs.79877	myotubularin related protein 6		3.0
447582	BE293520	Hs.18910	prostate cancer overexpressed gene	sugar_r;TM;SS	3.0
417365	D50683	Hs.82028	transforming growth factor, beta re	pkase,WD40;TM;	3.0
452540	AW161048	Hs.150549	ESTs, Weakly similar to T33977 hypo		2.9
430233	AW367902	Hs.236443	Homo sapiens mRNA: cDNA DKFZp564N10	PH,Etz,CH,spectrin,Ca_cha	2.9
418127	BE243982	Hs.83532	membrane cofactor protein (CD46, tr	sushi;TM;SS	2.9
404445			Target Exon		2.9
423323	AI951628	Hs.127007	potassium channel, subfamily K, mem	ion_trans;TM;SS	2.9
452093	AA447453	Hs.27860	Homo sapiens mRNA: cDNA DKFZp586M07	7tm_1,none	2.9
427981	BE275986	Hs.181311	asparaginyl-tRNA synthetase	tRNA-sym_2,tRNA_ant,tRN	2.9
452242	R50956	Hs.159993	glycosyltransferase		2.9
440232	AI766925	Hs.112554	ESTs		2.9
444634	AW611988	Hs.197813	ESTs	CKS	2.9
445889	BE465186	Hs.266958	ESTs	TM;	2.9
414483	R25513	Hs.10683	ESTs		2.9
453500	AI478427	Hs.43125	esophageal cancer related gene 4 pr	TM;SS	2.9
419768	T72104	Hs.93194	apolipoprotein A-I	Apolipoprotein;SS	2.9
427804	AL049654	Hs.180871	protein kinase C, alpha binding pro	PDZ;SS	2.9
423753	Y11312	Hs.132463	phosphoinositide-3-kinase, class 2,	C2,P13_P14_kinase,P13Ka,P	2.9
430699	AW969847	Hs.292718	ESTs, Weakly similar to RET2_HUMAN	lipocatin;SS	2.9
427842	AW936961		gb:RC1-DT0029-160200-013-a12 DT0029	efhand,mito_carr,none	2.8
432834	F06459	Hs.289113	cytochrome b5 reductase 1 (B5R.1)	NAD_binding,FAD_binding_6	2.8
421435	AW972072	Hs.372167	ESTs		2.8
402458			C1002064:gil11993050[gb]AAG42574.1)	TM;SS	2.8
410036	R57171	Hs.57975	calsequestrin 2 (cardiac muscle)	Calsequestrin;SS	2.8
412570	AA033517	Hs.74047	electron-transfer-flavoprotein, bel	ETF_beta;SS	2.8
459439	AW402931	Hs.352411	gb:UL-HF-BK0-abd-a-01-0-ULr1 NIH_M		2.8
438622	L03151		gb:Homo sapiens cell-type T-cell im		2.8
417023	AA192278	Hs.301596	ESTs, Moderately similar to S65657		2.8
453281	W46280	Hs.55940	ESTs, Weakly similar to A25704 syma		2.8
403028			Target Exon		2.8
449029	N28989	Hs.22891	solute carrier family 7 (cationic a	trypsin,trefol	2.8
425483	AF231022	Hs.158159	FAT tumor suppressor (Drosophila) h	aa_permeases;TM;SS	2.8
406918	M88357		gb:Homo sapiens DNA-binding protein	EGF_cadherin,laminin_G,TM	2.8
435213	AA092510	Hs.5985	non-kinase Cdc42 effector protein S	zf-C2H2,KRAB,zf-BED;TM;	2.7
443990	AW205085	Hs.39657	ESTs	TM;	2.7
451698	Y16187	Hs.26880	endothelin converting enzyme-like 1		2.7
431713	AK000388	Hs.267997	EHM2 gene	Peptidase_M13;TM;	2.7
431469	N49424	Hs.124159	ESTs	Band_41;TM;	2.7
400386	AF075290		gap junction protein, alpha 3, 46kD	SH3	2.7
406684	X16354	Hs.50964	carcinoembryonic antigen-related co	connexin;TM;SS	2.7
449874	AA135688	Hs.10083	Homo sapiens, clone IMAGE:4139786,	lg;TM;SS	2.7
403213			NM_019595:Homo sapiens interse	TM;	2.7
459665	BE159784	Hs.47647	gb:MR0-HT0408-220300-001-h08 HT0408	SH3,efhand,C2,PH,RhoGEF,T	2.7
421823	N40850	Hs.28625	ESTs		2.7
422693	BE300073	Hs.279860	tumor protein, translationally-cont	TCTP,none	2.7
454906	AI219323	Hs.101077	ESTs, Weakly similar to T22363 hypo	TM;	2.7
447075	AV662037	Hs.124740	ESTs, Weakly similar to I38022 hypo	TM;	2.7
450273	AW296454	Hs.24743	hypothetical protein FLJ20171	nm,none	2.7
434340	AI193043	Hs.128685	ESTs, Weakly similar to T17226 hypo		2.7
436972	AA284679	Hs.25640	claudin 3	PMP22_Claudin;TM;SS	2.7
441379	AW175787	Hs.334841	selenium binding protein 1	TM;	2.7
421143	AB024536	Hs.102171	immunoglobulin superfamily containi	lg,LRRLRRNT,LRRTC;TM;S	2.7
422558	NM_006420	Hs.118249	brefeldin A-inhibited guanine nucle	Sec7,none	2.7
428900	AA437189	Hs.352324	Human DNA sequence from clone RP1-6	SS	2.7
421153	AF009267	Hs.102238	Homo sapiens clone FBA1 Crl-du-chat		2.7
427074	AA527435	Hs.178589	hepatocellular carcinoma antigen ge	efhand;TM;	2.6
448133	AA723157	Hs.73769	folate receptor 1 (adult)	Folate_rec,MIP;TM;SS	2.6
419158	AF031475	Hs.89648	arginine vasopressin (neurophysin I	hormone5,hormone4;SS	2.6



448406	AW772298	Hs.21103	Homo sapiens mRNA; cDNA DKFZp564807		2.6
437176	AW176909	Hs.42346	calineurin-binding protein calcarc	Galactosyl_T;TM;SS	2.6
435075	RS1094	Hs.12400	ESTs		2.6
403153			Target Exon		2.6
5	400387	AF133131	double homeobox, 5		2.6
425940	AB023184	Hs.163990	KIAA0967 protein	PDZ;SS	2.6
416157	NM_003243	Hs.342874	transforming growth factor, beta re	zona_pefluclida;TM;SS	2.6
452554	AW452434	Hs.58006	ESTs, Weakly similar to ALU5_HUMAN	HLH,PAC,PAS:none	2.6
453247	T80198	Hs.111806	ESTs	wra,Cacha:none	2.6
10	407744	AB020629	ATP-binding cassette, sub-family A	ABC_tran,PRK;TM;SS	2.6
432877	AW974111	Hs.292477	ESTs	Ets,SAM_PNT:none	2.6
450115	AI591038	Hs.38132	ESTs		2.6
406337			C14000021:gi7242973 dbj BAA92547.1	Peptidase_M22	2.6
15	430877	NM_005269	Hs.2693	zf-C2H2;SS	2.6
453874	AW591783	Hs.36131	glioma-associated oncogene homolog		2.6
450493	M93718	Hs.166373	collagen, type XIV, alpha 1 (undull		2.6
427620	NM_003705	Hs.179866	nitric oxide synthase 3 (endothelia	NAD_binding,flavodoxin,FA	2.6
446585	AV659397	Hs.299668	solute carrier family 25 (mitochond	ethand,milo_corr;TM;SS=	2.6
427223	BE208189	Hs.174031	ESTs, Weakly similar to I38022 hypo		2.6
20	428111	S76617	cytochrome c oxidase subunit Vlb	tubulin,FKBP,COX6B,7tm_1,	2.6
440133	AB056255	Hs.133349	B lymphoid tyrosine kinase	SH2,SH3,ptkinase;SS	2.6
419693	AA133749	Hs.301350	ESTs		2.6
417103	Z33905	Hs.81218	FXID domain-containing ion transpor	ATP1G1_PUM_MAT8;TM;SS	2.6
419100	AA464362	Hs.6748	hypothetical protein MGC3597	TPR,zf-C3HCA,PHD;TM;SS=	2.6
449925	AI342493	Hs.24192	hypothetical protein PP1665	squash,GDP;TM;	2.6
25	430937	X53463	Homo sapiens cDNA FLJ20767 fis, clo		2.6
425640	U34051	Hs.158460	glutathione peroxidase 2 (gastroint	GSHPx;SS	2.6
409021	AA156640	Hs.49881	cyclin-dependent kinase 5, regulato	CDK5_activator;TM;	2.6
400538			fatty acid binding protein 3, muscl	lipocalin:none	2.6
30	446947	AF146747	ENSPO0000239776:BA425A6.2 (similar	TM;SS	2.6
408310	AW179023	Hs.191705	polycythemia rubra vera 1; cell sur	TM;SS	2.6
433032	AB084066	Hs.20072	gb:PM3-ST0036-170899-001-e08 ST0036		2.6
419389	AB074951	Hs.319095	myosin regulatory light chain inter		2.6
453145	R63438	Hs.183454	ESTs	Band_41;	2.6
35	443460	AL050275	Homo sapiens cDNA FLJ14883 fis, clo	DPPV_N_term:none	2.6
421903	AW079940	Hs.9383	DKFZP566D213 protein	STT3;TM;SS	2.6
421757	Z20897	Hs.15951	ESTs, Weakly similar to S32436 col	EGF,laminin_EGF,EB;TM;S	2.6
428475	AF172940	Hs.296259	paraoxonase 3	SS	2.5
424657	AA344719	Hs.184542	CGI-127 protein	Arylesterase;SS	2.5
40	432862	AW004958	gb:EST50901 Gall bladder II Homo sa		2.5
427195	W27230	Hs.236720	amniotless protein	TM;SS	2.5
447770	AB032417	Hs.173912	eukaryotic translation initiation f	DEAD,hefcase_C;	2.5
456523	AB083668	Hs.19545	frizzled (Drosophila) homolog 4	Fz,Frizzled,7tm_2;TM;SS	2.5
451846	T65840	Hs.50601	hypothetical protein MGC10986	ptkinase:none	2.5
432906	BE265489	Hs.11762	ESTs		2.5
453876	AW021748	Hs.3123	lethal giant larvae (Drosophila) ho	WD40;TM;	2.5
441488	AW450935	Hs.110406	ESTs, Weakly similar to I38022 hypo		2.5
444669	F18939	Hs.7862	hypothetical protein FLJ20312	TM;	2.5
50	452497	AA732153	ESTs		2.5
			Homo sapiens cDNA: FLJ21333 fis, cl		2.5

TABLE 31B:

Pkey:	Unique Eos probeset Identifier number
CAT number:	Gene cluster number
Accession:	Genbank accession numbers

Pkey	CAT Number	Accession
439457	23338_1	AF086274 W69434 W69517
413127	151610_1	BG007296 BF330853 BF747375 BE066356 BE066292 BF330900 BF747142 BE066419 BF742510 BE066529 BE066298 BF742516 BF746603
		BE066274 BF334312
427842	1164138_1	AW933690 AW933691 AA416706 R29415
438622	46171_1	L03151 L03155 L03161
424657	896375_1	AW963487 AA365077 AA344719

TABLE 31C:

Pkey:	Unique number corresponding to an Eos probeset
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NI_position:	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NI_position
401700	3176654	Minus	35416-35534
402449	9796674	Plus	59867-60039,62568-62828,63465-63623,6492
402632	9931268	Plus	101166-101419
404445	7596866	Minus	31112-31423
402458	9796782	Plus	170479-171134
403028	7670577	Minus	114150-114272
403213	7630897	Minus	162572-162739,164442-164540
403153	9799871	Minus	42232-43389
406337	9213455	Plus	90117-90337
400538	9797838	Plus	8752-8822

TABLE 32A: ABOUT 68 GENES UP-REGULATED IN GLIOMA COMPARED TO NORMAL ADULT TISSUES AND TO NON-MALIGNANT BRAIN TISSUES THAT ARE LIKELY TO ENCODE PROTEINS AMENABLE TO MODULATION BY SMALL MOLECULES, PEPTIDES, OR ANTIBODIES

Table 32A lists about 68 genes up-regulated in glioma compared to normal adult tissues and to non-malignant brain tissues that are likely to encode proteins amenable to modulation by small molecules, peptides, or antibodies. These were selected from the starting collection of 59680 probesets on the Affymetrix/Eos-Hu03 GeneChip array as follows: the ratio of "average" glioma to "average" normal adult tissues was greater than or equal to 2.5, the ratio of "average" glioma to "average" non-malignant brain tissues was greater than or equal to 2.0, the "average" glioma level was set to the 98th percentile value amongst various glioma specimens, the "average" normal adult tissue level was set to the 85th percentile value amongst various non-malignant tissues, the "average" non-malignant brain tissues level was set to the 90th percentile value amongst various non-malignant brain tissues, the "average" glioma value was greater than or equal to 50 units, and the predicted protein contained a structural domain that is indicative of having an oncogenic function or of transducing an intracellular signal, or of being modifiable by small molecules, peptides, or antibodies (e.g. kinase, death-domain, 7tm, phosphatase, or ion\_transporter). Predicted protein domains are noted.

Pkey: Unique Eos probe identifier number  
 ExAccn: Exempt Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 Protein Domains: Predicted Protein Domains  
 R1: glioma vs. normal adult tissues and non-malignant brain tissues that are likely to encode proteins

Pkey	ExAccn	Unigene ID	Unigene Title	Protein Domains	R1
424343	AW956360	Hs.4748	adenylate cyclase activating polypeptide	7tm_2,HRM	8.8
418506	AA084248	Hs.85339	Unknown protein for MGC:29643 (form		7.8
456723	Z43902	Hs.4748	adenylate cyclase activating polypeptide	7tm_2,HRM	7.5
430228	AW950939	Hs.6382	ESTs, Highly similar to T00391 hypo		7.1
436480	AJ271643	Hs.87469	putative acid-sensing ion channel	ASC,TM	6.3
407603	AW955705	Hs.62604	Homo sapiens, clone IMAGE:4299322,	TM	6.0
414825	X06370	Hs.77432	epidermal growth factor receptor (a	Furin-Bla,kinase,Recep_	6.0
423779	AW071837	Hs.57971	ESTs	TNFR_c6	5.5
409638	AW450420	Hs.21335	ESTs	7tm_2,HRM	5.3
442613	AJ004002	Hs.130522	Kv channel-interacting protein 1	Neur_chan_LBD,Neur_c	5.2
436456	AW292677	Hs.248122	G protein-coupled receptor 24		5.1
424340	AA339036	Hs.7033	ESTs	lig_chan,ANF_receptor,non	5.0
425115	R44664	Hs.123956	ESTs	7tm_1	4.7
446809	AW590171	Hs.101413	ESTs	CaMBD,SK_channel,CaMBD,SK	4.4
413278	BE563085	Hs.833	interferon-stimulated protein, 15 k	ubiquitin,SS	4.4
454360	L78207	Hs.54470	ATP-binding cassette, sub-family C	ABC_tran,ABC_membrane,PRK	4.2
414821	M63835	Hs.77424	Fc fragment of IgG, high affinity I	lg,TM;SS	4.2
428141	D50402	Hs.182611	solute carrier family 11 (proton-co	Nramp;TM	4.1
435472	AW972330	Hs.283022	triggering receptor expressed on my	lg,TM;SS	4.1
435615	Y15065	Hs.4975	potassium voltage-gated channel, KO	ion_trans,KCNQ1_channel,T	3.8
448204	AJ475124	Hs.170561	ESTs	lig_chan,SBP_bac_3	3.7
433290	R20077	Hs.302185	Homo sapiens clone 23618 mRNA seque	lig_chan,SBP_bac_3,ANF_re	3.6
408243	Y00787	Hs.624	interleukin 8	HLH,PAS,IL8;TM	3.6
415849	R20529	Hs.6806	ESTs	7tm_2,GPS,Gal_Lectin,HRM,	3.5
451099	RS2795	Hs.25954	interleukin 13 receptor, alpha 2	tn3,TM;SS	3.4
445070	NM_000677	Hs.258	adenosine A3 receptor	7tm_1,TM;SS	3.4
428037	N47474	Hs.89230	potassium intermediate/small conduc	CaMBD,SK_channel	3.2
444006	BE395085	Hs.10088	type I transmembrane protein Fn14	tdl_recept_La,PKD,MHC_1;TM	3.1
447143	AW292408	Hs.152290	ESTs, Highly similar to JC2463 vaso		3.0
418054	NM_002318	Hs.83354	lysyl oxidase-like 2	SRCR,Lysyl_oxidase;TM;S	3.0
424441	X14850	Hs.147097	H2A histone family, member X	histone,CBF_D_NFYB_HMF;TM=	3.0
446057	AJ420227	Hs.366053	Trp-p8 transient receptor potential		2.9
438204	AJ589545	Hs.128690	ESTs	7tm_1	2.9
431674	AA098901	Hs.301642	G-protein coupled receptor	GCV_H	2.9
424028	AF050504	Hs.153692	Homo sapiens cDNA FLJ14354 fs, clo		2.9
415209	F00183	Hs.172004	titin		2.8
438537	AK000511	Hs.6294	hypothetical protein DKFZp434L1435	tRNA-syn_1;TM	2.8
431053	S40369	Hs.249141	Glutamate receptor subunit	lig_chan,ANF_receptor,TM=	2.8
408482	NM_000676	Hs.45743	adenosine A2b receptor	7tm_1,TM;SS	2.8
414774	X02419	Hs.77274	plasminogen activator, urokinase	triple,trypsin_plant_thi	2.8
426865	D63476	Hs.172813	PAK-interacting exchange factor bet	SH3,PH,RhoGEF,Terpene_syn	2.8
430897	U71092	Hs.248122	G protein-coupled receptor 24	7tm_1;TM	2.7
438993	AA828995	Hs.54929	gb:cd77b08.a1 NCI_CGAP_Ov2 Homo sap	EGF,metalthio,integrin_B,	2.7
409552	AL119675	Hs.74619	phosphorylase kinase, gamma 1 (musc	kinase,Bac_DNA_binding,T	2.7
412817	AL037159	Hs.74619	proteasome (prosome, macropain) 26S	PC_rep;TM	2.7
429150	AF120103	Hs.197366	smoothed (Drosophila) homolog	COX8,SHMT,MIF,GST_C,EF1G,	2.7
419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C	ABC_tran,ABC_membrane,TM=	2.7
417680	BE241596	Hs.82848	selectin L (lymphocyte adhesion mol	EGF,lectin_c,sushi;TM;S	2.7
432074	AA525248	Hs.149723	ESTs	Y_phosphatase	2.6
402154			NM_031896: Homo sapiens calcium cha	PMP22,Claudin;TM;SS	2.6
431222	X56777	Hs.273790	zona pellucida glycoprotein 3A (spe	zona_pellucida;TM;SS	2.6
419913	AW270040	Hs.34455	ESTs	EPH_bd,tn3,kinase,	2.6
412802	U41518	Hs.74602	aquaporin 1 (channel-forming integr	MIP;TM;SS	2.6
412070	AW893260		gb:CM2-NN0010-100300-111-e09 NN0010	7tm_2,HRM	2.6
422676	D28481	Hs.1570	histamine receptor H1	7tm_1,TM;SS	2.6
422311	AF073515	Hs.114948	cytokine receptor-like factor 1	tn3;TM	2.6
444381	BE387335	Hs.283713	hypothetical protein BC014245	Collagen;TM;SS	2.6
419972	AL041465	Hs.182982	golgin-47		2.6
418526	BE019020	Hs.85838	solute carrier family 16 (monocarbo	TM;SS	2.6
421997	R66740	Hs.110613	KIAA0220 protein	aa_permeases,pyridoxal_de	2.6
430181	AF065314	Hs.234785	cyclic nucleotide gated channel alp	cNMP_binding,ion_trans;TM	2.5
426318	AA375125	Hs.147112	Homo sapiens cDNA: FLJ22322 fs, cl	EPH_bd,kinase,tn3,SAM,n	2.5
434808	AF155108	Hs.256150	NY-REN-41 antigen	TM	2.5
418843	AJ251016	Hs.89230	potassium intermediate/small conduc	CaMBD,SK_channel,TM;SS=	2.5
410290	AA402307	Hs.322844	hypothetical protein DKFZp564A176	Sema,PSI,TIG,integrin_B;T	2.5

424909	S78187	Hs.153752	cell division cycle 25B	Rhodanese:SS	2.5
408359	R38438	Hs.182575	SLC15A2 Solute carrier family 15 (H	PTR2:TM;	2.5
414561	A1064813	Hs.195155	Homo sapiens amino acid transport s	Aa_trans:TM;	2.5

5

TABLE 32B:

Key:	Unique Eos probeset identifier number
CAT number:	Gene cluster number
Accession:	Genbank accession numbers

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Key	CAT Number	Accession
438993	2580163_1	A1926361 AAB34879 AA828995
412070	287551_1	BG820657 AW890808 BF904755 AW893260 B1034684 BF963423 BF961550 M85689

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Key:	Unique number corresponding to an Eos probeset
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NL_position:	Indicates nucleotide positions of predicted exons.

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Key	Ref	Strand	NL_position
402154	8516165	Minus	125299-125494

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TABLE 33A: ABOUT 798 GENES UP-REGULATED IN KIDNEY CANCER

Table 33A lists about 798 genes up-regulated in kidney cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GenaChip array such that the ratio of "average" kidney cancer to "average" normal adult tissues was greater than or equal to 3.0. The "average" kidney cancer level was set to the 90th percentile amongst various kidney cancers. The "average" normal adult tissue level was set to the 90th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst the various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

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Key:	Unique Eos probeset identifier number
ExAccn:	Exemplar Accession number, Genbank accession number
UnigeneID:	Unigene number
Unigene Title:	Unigene gene title
R1:	Ratio of tumor to normal tissue

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Key	ExAccn	UnigeneID	Unigene Title	R1
421471	U90545	Hs.104635	solute carrier family 17 (sodium phospho	1007.4
445178	A1792241	Hs.129614	kidney-specific membrane protein	438.0
452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	338.4
421727	Y13153	Hs.107318	kynurenine 3-monooxygenase (kynurenine 3	323.6
440304	BE159984	Hs.125395	ESTs	295.0
436878	BE465204	Hs.47448	ESTs	258.8
452795	AW392555	Hs.18878	hypothetical protein FLJ21620	258.6
421155	H87879	Hs.102267	lysyl oxidase	251.8
426471	M22440	Hs.170009	transforming growth factor, alpha	224.6
421478	A1683243	Hs.97258	ESTs	212.6
424086	A1351010	Hs.102267	lysyl oxidase	199.2
428296	NM_003058	Hs.183572	solute carrier family 22 (organic cation	186.4
426890	AA393167	Hs.41294	ESTs	183.4
441031	A1110584	Hs.7645	fibrinogen, B beta polypeptide	174.0
411642	NM_014932	Hs.71132	neuroigin 1	172.4
452838	U65011	Hs.30743	preferentially expressed antigen in mela	161.4
425984	AW836277	Hs.165636	hypothetical protein DKFZp761C07121	151.0
438966	AW979074	Hs.32042	gb:EST391184 MAGE resequences, MAGP Homo	135.0
453165	S74727	Hs.146228	aspartoacylase (aminoacylase 2, Canavan	134.8
453160	A1263307	Hs.29499	ESTs	132.6
452431	U88879	Hs.129711	hepatitis A virus cellular receptor 1	130.6
423508	AW604297	Hs.99545	Homo sapiens cDNA FLJ10658 fs, clone NT	120.4
420642	AK001520	Hs.41716	endothelial cell-specific molecule 1 (NO	112.6
407975	X89426	Hs.108873	ESTs	111.8
431708	A1698136	Hs.150164	ESTs	109.8
446460	AW013999	Hs.133529	ESTs	103.6
443450	N66045	Hs.152484	ESTs	103.0
432865	A1753709	Hs.3281	gb:os26b03.s1 NCI_CGAP_Kid5 Homo sapiens	101.4
442438	AA995998	Hs.77890	neuronal pentraxin II	98.8
433447	U29195	Hs.125407	ESTs, Moderately similar to ALUE_HUMAN I	98.5
440311	A1733079	Hs.120655	guanylate cyclase 1, soluble, beta 3	98.2
415076	NM_000857	Hs.20117	ESTs	97.0
437157	BE048860	Hs.17170	ESTs	94.4
453319	AF985369	Hs.41095	G protein-coupled receptor 4	91.4
447046	AA326187	Hs.105500	ESTs	90.2
439169	AF912122	Hs.22245	ESTs	86.6
431870	AW449902	Hs.213897	ESTs	84.4
438993	AA828995	Hs.122613	gb:ad77b08.s1 NCI_CGAP_Ov2 Homo sapiens	83.8
445279	R41900	Hs.123655	ESTs	82.4
451592	A1805416	Hs.111128	ESTs	79.4
422966	AV648419	Hs.118140	dimethylglycine dehydrogenase precursor	78.8
423109	M59305	Hs.38085	natriuretic peptide receptor C/guanylate	78.0
415989	A1267700	Hs.200097	ESTs	77.0
422544	AB018259		KIAA0716 gene product	74.8
425878	AW964806		ESTs, Weakly similar to putative glycine	74.8
429352	AK001512		hypothetical protein FLJ10650	73.0

80

	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	72.2
	441665	A1301355	Hs.151285	ESTs	71.6
	435094	A1560129	Hs.277523	EST	71.2
	403345				69.6
5	430440	X52599	Hs.2561	nerve growth factor, beta polypeptide	69.0
	440482	AA886658	Hs.50873	ESTs	67.6
	457100	AA417878	Hs.48401	ESTs, Weakly similar to ALU8_HUMAN ALU S	67.0
	420637	AW976153		gb:EST388262 MAGE resequences, MAGN Homo	65.2
	407905	AW103655	Hs.252905	ESTs	63.2
10	422998	AK000588	Hs.122939	hypothetical protein FLJ20581	61.8
	432267	AK000872	Hs.274227	Homo sapiens cDNA FLJ10010 fis, clone HE	61.2
	449448	D60730	Hs.57471	ESTs	60.6
	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fis, clone CO	59.8
	419752	AA249573	Hs.152618	ESTs	58.4
15	449579	AW207260	Hs.134014	prostate cancer associated protein 6	58.2
	408609	AA330431	Hs.640	calcitonin receptor	57.4
	451009	AA013140	Hs.115707	ESTs	57.2
	435610	A1862767	Hs.114157	ESTs, Weakly similar to putative p150 [H]	56.4
20	411893	R82845	Hs.273789	ESTs	56.2
	415227	AW821113	Hs.72402	ESTs	55.2
	433859	AW986758	Hs.163825	ESTs	55.0
	450459	A1697193	Hs.299254	ESTs	54.4
	400302	N48056	Hs.1915	lipase hydrolase (prostate-specific memb	53.4
	421831	AA298836	Hs.22026	ESTs	52.8
25	438817	A1023799	Hs.163242	ESTs	52.1
	449101	AA205847	Hs.23016	G protein-coupled receptor	52.0
	410025	BE220489	Hs.113592	ESTs	51.8
	423685	BE350494	Hs.49753	Homo sapiens mRNA for KIAA1561 protein,	48.0
30	436751	AA732217	Hs.294054	ESTs	46.6
	445424	AB028945	Hs.12696	coactin SH3 domain-binding protein	45.4
	444059	R69743	Hs.75442	albumin	44.8
	442671	A1005668	Hs.134779	EST	44.4
	445657	AW612141	Hs.279575	ESTs	44.3
35	452891	N75582	Hs.212875	ESTs, Weakly similar to KIAA0357 (H.sapi	44.0
	423735	AA330259		gb:EST33963 Embryo, 12 week II Homo sapi	43.8
	422553	A1697720	Hs.171455	ESTs	43.6
	452461	N78223	Hs.108106	transcription factor	42.8
	408430	S79876	Hs.44926	dipeptidylpeptidase IV (CD26, adenosine	42.6
40	452240	A1591147	Hs.61232	ESTs	41.7
	445186	AW614544	Hs.123641	protein tyrosine phosphatase, receptor t	41.4
	452788	AW294571	Hs.136040	ESTs	41.4
	419287	X91906	Hs.69872	chloride channel 5 (nephrothiasis 2, X	40.6
	428822	W28418	Hs.301148	potassium voltage-gated channel, Isk-rel	40.2
45	412359	AW837985		gb:QV3-LT0048-140200-083-e05 LT0048 Homo	40.0
	434208	T92641	Hs.127648	hypothetical protein PRO2176	39.2
	442168	A1253165	Hs.146022	ESTs	38.8
	400792	AA835062	Hs.50094	Homo sapiens mRNA; cDNA DKFZp434O0515 (f	38.6
	445900	AF070526	Hs.13429	Homo sapiens clone 24787 mRNA sequence	38.4
	444743	AA045648	Hs.11817	nudix (nucleoside diphosphate linked moi	38.4
50	428795	R45503	Hs.97469	ESTs, Weakly similar to I49698 alpha-1,3	37.6
	406411				37.6
	423657	AL045128	Hs.1691	glucan (1,4-alpha-), branching enzyme 1	37.5
	417218	AA005247	Hs.285754	met proto-oncogene (hepatocyte growth fa	37.2
55	448788	A1570286	Hs.107070	ESTs	37.2
	441826	AW503603	Hs.129915	phosphotriesterase related	37.0
	409263	AA069573	Hs.50319	ESTs	36.8
	425577	BE464496	Hs.280977	ESTs	36.2
	452249	BE394412	Hs.61252	ESTs	34.8
60	435986	AA703158	Hs.187848	ESTs	34.4
	417236	A1908497	Hs.170737	Homo sapiens cDNA: FLJ23251 fis, clone C	33.8
	440234	AW117264	Hs.126252	ESTs	33.8
	435334	R94223	Hs.117747	ESTs	33.2
	410153	BE311926	Hs.15830	Homo sapiens cDNA FLJ12691 fis, clone NT	33.1
65	424871	NM_004525	Hs.153595	low density lipoprotein-related protein	32.8
	420908	AL049974	Hs.100261	Homo sapiens mRNA; cDNA DKFZp564B222 (fr	32.4
	423992	AW898292	Hs.137206	Homo sapiens mRNA; cDNA DKFZp564H1663 (f	32.4
	451050	AW937420	Hs.69662	ESTs	32.0
	449034	A1624049		gb:41a09.x1 NCI_CGAP_U1 Homo sapiens	31.6
70	434539	AW748078	Hs.214410	ESTs	31.0
	431595	AA508196		gb:nh60R07.s1 NCI_CGAP_Pr8 Homo sapiens	30.6
	449625	NM_014253	Hs.23796	odc (odd Oz/ten-m, Drosophila) homolog 1	30.5
	448243	AW369771	Hs.77496	small nuclear ribonucleoprotein polypept	30.4
	413573	A1733859	Hs.149089	ESTs	30.2
75	421037	A1684808	Hs.197653	ESTs	30.2
	449353	AA001220	Hs.271369	ESTs	30.2
	416548	H62953		gb:yr47R06.r1 Soares fetal liver spleen	29.6
	423020	AA383092	Hs.1608	replication protein A3 (14kD)	29.6
80	422420	U03398	Hs.1524	tumor necrosis factor (ligand) superfamily	29.6
	459508	R83265	Hs.205956	ESTs	29.2
	414245	BE148072	Hs.75850	WAS protein family, member 1	28.8
	424565	AW102723	Hs.75295	guanylate cyclase 1, soluble, alpha 3	28.6
	445925	A1733820	Hs.145664	ESTs	28.4
	412616	AW970584	Hs.291033	ESTs	28.0

	424638	AU72106	Hs.49303	Homo sapiens cDNA FLJ11663 fs, clone HE	27.6
	445885	AJ734009	Hs.127699	KIAA1603 protein	27.6
	410247	AF181721	Hs.61345	RU2S	27.4
	406414				27.2
5	435951	AF269162	Hs.41267	c21orf7 form A-D	27.2
	458680	N73773	Hs.282950	ESTs	27.0
	419948	AB041035	Hs.93847	NADPH oxidase 4	26.4
	423276	AC003034	Hs.126261	Homo sapiens Chromosome 16 BAC clone CIT	26.3
	427457	AW779105	Hs.164682	ESTs, Weakly similar to ORF2 consensus s	26.0
10	446346	AI290205	gb:U79p06.x1 Soares_NhMMPu_S1 Homo sapi	26.0	
	448595	AB014544	Hs.21572	KIAA0644 gene product	25.8
	419569	AI971651	Hs.91143	jagged 1 (Alagille syndrome)	25.6
	433242	AB040938	Hs.113940	KIAA1505 protein	25.6
	453118	AW195849	Hs.252757	ESTs	25.6
15	412209	AW901456	gb:RC0-NN1012-270300-031-c07 NN1012 Homo	25.2	
	429710	AI337113	Hs.146025	Homo sapiens cDNA: FLJ23594 fs, clone L	25.2
	444783	AK001468	Hs.62180	anilin (Drosophila Scraps homolog), act	24.6
	436788	AA766908	Hs.259047	ESTs	24.4
20	427660	AI741320	Hs.114121	Homo sapiens cDNA: FLJ23228 fs, clone C	24.4
	419172	AW338625	Hs.22120	ESTs	24.3
	436061	AI248584	Hs.190745	Homo sapiens cDNA: FLJ21326 fs, clone C	24.2
	413623	AA825721	Hs.246973	ESTs	24.0
	407615	AW753085	gb:PM1-CT0247-151299-005-a03 CT0247 Homo	23.8	
25	452466	N84635	Hs.29664	Human DNA sequence from clone 682115 on	23.8
	432809	AA565509	Hs.131703	ESTs	23.7
	440102	AI672443	Hs.131190	ESTs	23.6
	451559	AL119980	Hs.128857	ESTs	23.2
	410811	AW805687	Hs.300648	ESTs	23.0
30	416778	M16505	Hs.79876	steroid sulfatase (microsomal), arylsulf	23.0
	453628	AW243307	Hs.170187	ESTs	22.8
	401352				22.6
	451561	N52812	Hs.177403	ESTs	22.6
	401976				22.4
35	410858	AW105231	Hs.192035	ESTs	22.4
	416220	N49776	Hs.121773	ESTs	22.2
	424073	U03493	Hs.138959	gap junction protein, alpha 7, 45kD (con	22.0
	444575	AI264847	Hs.22545	Homo sapiens cDNA FLJ12935 fs, clone NT	22.0
	444144	BE159397	Hs.7736	hypothetical protein	21.8
40	438504	AW665281	Hs.224625	ESTs	21.2
	439157	AA912737	Hs.20160	ESTs	20.8
	429006	AA443143	Hs.50929	Homo sapiens cDNA FLJ13842 fs, clone TH	20.5
	442006	AW975183	Hs.292663	ESTs	20.2
	409569	AW573153	Hs.256216	ESTs	19.8
45	421160	AL080215	Hs.102301	Homo sapiens mRNA: cDNA DKFZp586J0323 (I	19.8
	404200				19.6
	446591	H44186	Hs.15456	POZ domain containing 1	19.2
	420218	AW958037	Hs.22437	Homo sapiens cDNA: FLJ23366 fs, clone H	18.9
	408390	AA064222	Hs.40400	ESTs	18.8
50	444038	AW134509	Hs.135077	ESTs	18.8
	446443	AV659082	Hs.134228	ESTs	18.8
	442204	AI635450	Hs.21914	ESTs	18.4
	451177	AI969716	Hs.13034	ESTs	18.2
	453931	AL121278	Hs.25144	ESTs	18.1
	437212	AI765021	Hs.210775	ESTs	18.1
55	431806	AF186114	Hs.270737	tumor necrosis factor (ligand) superfamily	18.0
	451659	BE379761	Hs.14248	ESTs, Weakly similar to ALU8_HUMAN ALU S	17.8
	423909	AJ223183	Hs.135194	immunoglobulin superfamily, member 6	17.6
	441082	AW444804	Hs.202655	ESTs	17.6
60	446259	AA425204	Hs.42278	Homo sapiens cDNA FLJ13391 fs, clone PL	17.6
	423609	AA328348	Hs.218289	ESTs	17.4
	428301	AW628666	Hs.98440	ESTs	17.4
	446364	AB006624	Hs.14912	KIAA0286 protein	17.4
	419983	W55958	Hs.94030	Homo sapiens mRNA: cDNA DKFZp586E1624 (I	17.0
65	424929	AI640761	Hs.224988	ESTs	17.0
	425695	NM_005401	Hs.159238	protein tyrosine phosphatase, non-recept	17.0
	449122	AI631310	Hs.196955	ESTs	17.0
	409519	AA075368	gb:zm88h10.r1 Stratagene ovarian cancer	16.8	
	410947	AK000305	Hs.67055	hypothetical protein FLJ20268	16.8
70	418053	AA211493	gb:zn55d06.a1 Stratagene muscle 937209 H	16.8	
	433225	AW816515	Hs.173540	ATPase, Class V, type 10D	16.8
	443204	AW205878	Hs.29643	Homo sapiens cDNA FLJ13103 fs, clone NT	16.6
	421002	AF116030	Hs.100932	transcription factor 17	16.5
	419296	AA236115	Hs.120785	ESTs	16.2
75	421659	NM_014459	Hs.106511	protocadherin 17	16.0
	417589	T82075	Hs.13911	ESTs	16.0
	446057	AA202227	Hs.149358	ESTs	15.8
	434636	AA083764	Hs.241334	ESTs	15.6
	446797	AI682536	Hs.163495	Homo sapiens cDNA FLJ13608 fs, clone PL	15.6
80	443718	AK083580	Hs.221373	ESTs	15.4
	409748	AI670776	Hs.20961	ESTs	15.2
	443211	AI128388	Hs.143655	ESTs	15.0
	428911	Z43846	Hs.194478	Homo sapiens mRNA: cDNA DKFZp434O1572 (I	14.9
	444692	AW779922	Hs.145047	ESTs	14.8

	445436	AI224105	Hs.151408	ESTs	14.6
	408684	R61377	Hs.12727	hypothetical protein FLJ21610	14.5
	405943				14.4
	405291				14.4
5	458679	AW975460	Hs.143563	ESTs	14.4
	450152	AI138635	Hs.22968	ESTs	14.4
	403899				14.2
	454490	AW797778		gb:CM2-UM0041-250200-104-d02 UM0041 Homo	14.2
10	451807	W52854	Hs.27099	DKFZP564J0863 protein	14.0
	452453	AI902519		gb:QV-BT009-101198-051 BT009 Homo sapien	13.8
	447499	AW262580	Hs.147674	KIAA1621 protein	13.8
	406598				13.8
	430939	AI269471	Hs.187018	ESTs	13.4
	443316	AI478463	Hs.18443	ESTs	13.4
15	408034	N26639	Hs.42192	Human EST clone 251800 mariner transpos	13.2
	428508	BE252383	Hs.184568	SB8131 protein	13.2
	447934	AW631440	Hs.165596	ESTs	13.2
	406671	AA129547	Hs.285754	met proto-oncogene (hepatocyte growth fa	13.1
20	438199	AW016531	Hs.122147	ESTs	13.0
	415511	AI732617	Hs.182362	ESTs	12.9
	426920	AA393351	Hs.132121	ESTs	12.8
	447311	R37010	Hs.33417	Homo sapiens cDNA: FLJ22806 fs, clone K	12.6
	423321	AB013885	Hs.126926	beta-ureidopropionase	12.5
	403622				12.4
25	439759	AL359055	Hs.67709	Homo sapiens mRNA full length insert cDN	12.4
	422317	NM_001147	Hs.115181	angiotensin 2	12.2
	428637	AW979268		gb:EST391378 MAGE resequences, MAGP Homo	12.2
	445717	AW664658	Hs.149332	ESTs	12.2
30	418413	R95735	Hs.117753	ESTs, Weakly similar to antigen of the m	12.1
	405336				12.0
	437100	AI761073	Hs.14535	Homo sapiens cDNA: FLJ22314 fs, clone H	12.0
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	12.0
	414923	AW445008	Hs.77637	homeo box A4	11.9
35	432009	AL137424		gb:Homo sapiens mRNA; cDNA DKFZp761G2123	11.8
	433326	AI379486	Hs.159430	ESTs	11.8
	453955	AW579207		gb:RC1-DT0029-120100-011-h01 DT0029 Homo	11.8
	407510	U96191		gb:Human trophoblast hypoxia-regulated f	11.6
	433231	AB040926	Hs.143552	KIAA1493 protein	11.6
40	451851	AI097337	Hs.88977	hypothetical protein dJ511E16.2	11.6
	443672	AA323382	Hs.9667	butyrobetaine (gamma), 2-oxoglutarate di	11.4
	405609				11.4
	418912	NM_000685	Hs.89472	angiotensin receptor 1	11.4
	421306	AA806207	Hs.125889	ESTs	11.4
45	428721	X02158	Hs.2303	erythropoietin	11.4
	419255	AA235672	Hs.87491	ESTs	11.4
	450006	AI241555	Hs.60171	ESTs	11.3
	435420	AI928513	Hs.59203	ESTs	11.2
	449802	AW901804	Hs.23984	hypothetical protein FLJ20147	11.2
50	424647	W67751	Hs.137308	ESTs	11.0
	435758	AI242163	Hs.22670	chromodomain helicase DNA binding protei	11.0
	404347				10.8
	438664	AI911173	Hs.213722	ESTs	10.8
	429125	AA446854	Hs.271004	ESTs	10.7
55	416560	R02818	Hs.14102	ESTs	10.6
	429945	NM_006729	Hs.226483	diaphanous (Drosophila, homolog) 2	10.6
	435085	AW130284	Hs.192752	ESTs, Moderately similar to NSD1 protein	10.6
	442409	BE208843	Hs.129544	ESTs, Weakly similar to ORF YLL027w [S.c	10.6
	450644	AW505496	Hs.281215	ESTs	10.6
60	448298	AW137134	Hs.187203	ESTs	10.4
	404115				10.2
	406242				10.2
	420757	X78592	Hs.99915	androgen receptor (dihydrotestosterone r	10.2
	452588	AA889120	Hs.110637	homeo box A10	10.2
65	457233	AI355009	Hs.221698	ESTs	10.2
	416185	AW975861	Hs.291995	ESTs	10.2
	446152	AI292036	Hs.150028	ESTs	10.1
	446298	AF187813	Hs.14637	kidney- and liver-specific gene	10.1
	423637	AL137279	Hs.130187	Homo sapiens mRNA; cDNA DKFZp434O1214 (f	10.0
70	442405	BE465247	Hs.129530	ESTs	9.9
	419213	AW749146		gb:PMO-BT0340-170100-004-e03 BT0340 Homo	9.8
	420840	AI915838	Hs.294008	ESTs	9.8
	423355	AA324856	Hs.257510	ESTs	9.8
	444929	AI685841	Hs.161354	ESTs	9.8
75	423811	AW299598	Hs.50895	homeo box C4	9.8
	433527	AW235613	Hs.133020	ESTs	9.6
	429975	AI167145	Hs.165538	ESTs	9.6
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	9.5
	433703	AA210863	Hs.3532	nemo-like kinase	9.2
80	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	9.2
	451821	AI879148	Hs.26770	fatty acid binding protein 7, brain	9.2
	406992	S82472		gb:beta-pol-DNA polymerase beta (exon a	9.2
	419699	AA248998	Hs.31246	ESTs	9.2
	443740	R56434	Hs.21062	ESTs	9.2

	422728	AW937826	Hs.103262	ESTs	9.2
	436961	AW375974	Hs.156704	ESTs	9.2
	431385	BE178536	Hs.11090	high affinity immunoglobulin epsilon rec	9.1
	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	9.1
5	424115	AA335497	Hs.293965	ESTs	9.0
	402045				9.0
	433426	H69125	Hs.133525	ESTs	9.0
	425493	AW363582	Hs.75323	prohibitin	9.0
	447641	BE619186		gb:601472933F1 NIH_MGC_68 Homo sapiens c	9.0
10	403095				8.8
	407942	AA378608	Hs.5894	hypothetical protein FLJ10305	8.8
	423126	AA322245	Hs.290165	ESTs	8.8
	408134	AK000184	Hs.42945	acid sphingomyelinase-like phosphodiester	8.7
	450375	AA009647	Hs.8850	a disintegrin and metalloproteinase doma	8.6
15	443647	AV653846	Hs.126261	Homo sapiens Chromosome 16 BAC clone CIT	8.6
	401439				8.6
	449532	W74653	Hs.271593	ESTs	8.6
	453187	AI918269	Hs.109057	ESTs, Weakly similar to ALU5_HUMAN ALU S	8.6
	448450	BE612490		gb:601451884F1 NIH_MGC_66 Homo sapiens c	8.5
20	425176	AW015644	Hs.301430	ESTs, Moderately similar to TEF1_HUMAN T	8.4
	407721	Y12735	Hs.38018	dual-specificity tyrosine-(Y)-phosphoryl	8.4
	402921				8.4
	428133	AW167727	Hs.11873	ESTs	8.4
	419503	AA243642	Hs.137422	ESTs	8.4
25	452644	AW452616	Hs.212481	ESTs	8.4
	452259	AA317439	Hs.28707	signal sequence receptor, gamma (transio	8.4
	409695	AA296961		gb:EST112514 Adrenal gland tumor Homo sa	8.3
	418076	R61388	Hs.6724	ESTs	8.3
	402695				8.3
30	423099	NM_002837	Hs.123641	protein tyrosine phosphatase, receptor t	8.3
	413998	AW103807	Hs.243933	ESTs	8.2
	410008	AA079552		gb:zm20h12.s1 Stratagene pancreas (93720	8.2
	416623	N74925	Hs.38761	Homo sapiens cDNA: FLJ21564 fs, clone C	8.2
	450001	NM_001044	Hs.406	solute carrier family 6 (neurotransmitte	8.1
35	435496	AW840171	Hs.265398	ESTs, Weakly similar to transformation-r	8.0
	413627	BE182082	Hs.246973	ESTs	8.0
	415713	AW968573		gb:EST380649 MAGE resequences, MAGJ Homo	8.0
	426695	AW118191	Hs.112729	ESTs	8.0
	452284	AW451426	Hs.252740	ESTs	8.0
40	454933	BE141714		gb:QV0-HT0101-061099-032-c04 HT0101 Homo	8.0
	426269	H15302	Hs.168950	Homo sapiens mRNA: cDNA DKFZp566A1046 (f	8.0
	418882	NM_004996	Hs.89433	ATP-binding cassette, sub-family C (CFTR	8.0
	444107	T46839	Hs.10319	UDP glycosyltransferase 2 family, polype	7.9
45	445740	T78281	Hs.13226	Homo sapiens clone 25181 mRNA sequence	7.9
	433190	M26901	Hs.3210	renin	7.8
	432777	AA564991	Hs.269477	ESTs	7.8
	449444	AW818436	Hs.23590	solute carrier family 16 (monocarboxylic	7.7
	444042	NM_004915	Hs.10237	ATP-binding cassette, sub-family G (WHIT	7.7
	434032	AW009951	Hs.206892	ESTs	7.7
50	419750	AL079741	Hs.183114	Homo sapiens cDNA FLJ14236 fs, clone NT	7.6
	439024	R96696	Hs.35598	ESTs	7.6
	437205	AL110232		gb:Homo sapiens mRNA: cDNA DKFZp564D0271	7.4
	446030	AF131805	Hs.13544	Homo sapiens clone 24850 mRNA sequence	7.4
55	446311	AW007294	Hs.149795	ESTs, Weakly similar to ALU1_HUMAN ALU S	7.4
	452683	X80031	Hs.150318	ESTs	7.4
	448253	H25899	Hs.201591	ESTs	7.4
	406030				7.4
	437084	AI911516	Hs.127811	ESTs	7.3
60	435013	H91923	Hs.110024	NADH:ubiquinone oxidoreductase MLRQ subu	7.3
	432143	AL040183	Hs.123484	ESTs, Weakly similar to The KIAA0149 gen	7.3
	409594	AA076118		gb:zm18e06.s1 Stratagene pancreas (93720	7.2
	425151	AA351814	Hs.288678	ESTs	7.2
	448582	AI538880	Hs.94812	ESTs	7.2
	455068	AI807894	Hs.27910	centrosomal protein 2	7.2
65	406504				7.2
	428395	AA427992	Hs.104885	ESTs, Weakly similar to zinc finger prot	7.2
	421102	AI470093	Hs.89217	ESTs	7.2
	423181	AL049227	Hs.124776	Homo sapiens mRNA: cDNA DKFZp564N1115 (f	7.1
70	410534	AW905138		gb:QV0-NN1071-280400-207-g07 NN1071 Homo	7.1
	415084	M19267	Hs.77899	tropomyosin 1 (alpha)	7.0
	410274	AA381807	Hs.61762	hypoxia-inducible protein 2	7.0
	439416	W58294	Hs.56254	ESTs	6.9
	420036	R60336	Hs.52792	Homo sapiens mRNA: cDNA DKFZp586I1823 (f	6.8
	423349	AF010258	Hs.127428	homeo box A9	6.8
75	413070	AA126776		gb:zm88c11.s1 Stratagene lung carcinoma	6.8
	449361	AW207890	Hs.201918	ESTs	6.8
	459309	AA040620	Hs.109144	ESTs	6.8
	408771	AW732573	Hs.47584	potassium voltage-gated channel, delayed	6.8
80	416462	W92845		gb:zh60f05.r1 Soares_fetal_liver_spleen_	6.8
	447835	AW591623	Hs.164129	ESTs	6.7
	403563				6.7
	427897	NM_017413	Hs.181060	apelin; peptide ligand for APJ receptor	6.6
	422063	BE156476		gb:QV0-HT0368-040100-082-c05 HT0368 Homo	6.6

5	455275	AW977806		gb:EST389810 MAGE resequences, MAGO Homo	6.6
	441350	AB020690	Hs.7782	paraneoplastic antigen MA2	6.6
	445575	Z25368	Hs.172004	titin	6.6
	446075	AW451457	Hs.279179	ESTs	6.6
	405963				6.6
10	423049	X59373	Hs.188023	ESTs	6.6
	436456	AW292677	Hs.65909	ESTs	6.5
	420273	AB652664	Hs.197257	ESTs	6.5
	420831	AA280824	Hs.190035	ESTs	6.4
	423739	AA398155	Hs.97600	ESTs	6.4
15	441559	AA938448	Hs.259733	ESTs	6.4
	433959	AA778212	Hs.191869	ESTs	6.4
	439703	AF066538	Hs.196245	ESTs	6.4
	433757	AJ949974	Hs.152670	ESTs	6.3
	422095	AJ868872	Hs.288966	ceruloplasmin (ferroxidase)	6.3
20	415138	C18356	Hs.78045	tissue factor pathway inhibitor 2	6.3
	448515	H68441	Hs.13528	Homo sapiens cDNA FLJ14054 fs, clone HE	6.3
	443595	AF169312	Hs.9613	PPAR(gamma) angiopoietin related protein	6.3
	429357	AA778725	Hs.164589	ESTs	6.3
	404939				6.3
25	417071	N58820	Hs.275133	ESTs	6.2
	436209	AW850417	Hs.254020	ESTs, Moderately similar to unnamed prot	6.2
	403111				6.2
	448796	AA147829	Hs.33193	ESTs, Highly similar to AC007228.3 BC372	6.2
	442353	BE379594	Hs.49136	ESTs	6.2
30	451110	AJ955040	Hs.301584	ESTs	6.1
	420092	AA814043	Hs.88045	ESTs	6.1
	441801	AW242799	Hs.211874	ESTs	6.0
	407500	U43279		gb:Human nucleoporin nup 36 mRNA, comple	6.0
	450864	R64139	Hs.205225	ESTs	6.0
35	455711	BE069465		gb:RC2-8T0388-290100-012-a11 8T0388 Homo	6.0
	405394				6.0
	436476	AA326108	Hs.53631	ESTs, Weakly similar to enhancer-of-split	6.0
	454392	BE260893		gb:601150577F1 NIH_MGC_19 Homo sapiens c	6.0
	414575	H11257	Hs.295233	ESTs	5.9
40	435787	H73505	Hs.117874	ESTs	5.9
	445495	BE622641	Hs.38489	ESTs	5.9
	428372	AK000684	Hs.183887	hypothetical protein FLJ22104	5.9
	436464	AJ016176	Hs.269783	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.9
	415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	5.9
45	402421				5.8
	417038	T85230		gb:yd33f02.r1 Soares fetal liver spleen	5.8
	438461	AW511956	Hs.293261	ESTs	5.8
	440870	AJ587284	Hs.150539	Homo sapiens cDNA FLJ13793 fs, clone TH	5.8
	452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fs, clone PL	5.8
50	417280	AW173116	Hs.262206	ESTs	5.7
	437259	AJ377755	Hs.120696	ESTs	5.7
	425717	X07282	Hs.171495	retinoic acid receptor, beta	5.7
	443614	AV655386	Hs.7645	fibrinogen, B beta polypeptide	5.7
	450825	AW970107		gb:EST382188 MAGE resequences, MAGK Homo	5.6
55	425305	AA363025	Hs.155572	Human clone Z3801 mRNA sequence	5.6
	430371	D87468	Hs.240112	KJAA0276 protein	5.6
	430499	AW969408	Hs.231991	ESTs	5.6
	427920	Z11502	Hs.181107	annexin A13	5.6
	449318	AW236021	Hs.108788	ESTs, Weakly similar to zeste [D.melanog	5.6
60	407864	AF069291	Hs.40539	chromosome 8 open reading frame 1	5.5
	410754	T63840		gb:yc16b10.s1 Stratagene lung (937210) H	5.5
	415286	AW249540	Hs.72548	ESTs	5.5
	443297	AJ049864	Hs.133029	ESTs	5.5
	440138	AB033023	Hs.6982	hypothetical protein FLJ10201	5.5
65	441006	AW605267	Hs.7627	CGI-60 protein	5.4
	409348	AJ401535	Hs.146090	ESTs	5.4
	449679	AJ823951	Hs.296668	Homo sapiens cDNA FLJ11846 fs, clone HE	5.4
	408938	AA059013	Hs.22607	ESTs	5.4
	456411	AA603305		gb:np12d11.s1 NCI_CGAP_Pr3 Homo sapiens	5.4
70	443756	AW089799	Hs.153665	ESTs	5.4
	422232	D43945	Hs.113274	transcription factor EC	5.4
	424574	BE408618	Hs.150748	malonyl-CoA decarboxylase	5.3
	424834	AK001432	Hs.153408	Homo sapiens cDNA FLJ10570 fs, clone NT	5.3
	440589	BE397763	Hs.194478	Homo sapiens mRNA; cDNA DKFZp434O1572 (f	5.3
75	425782	U66468	Hs.159525	cell growth regulatory with EF-hand doma	5.3
	450236	AW162998	Hs.24684	KIAA1376 protein	5.3
	418110	R43523	Hs.217754	Homo sapiens cDNA: FLJ22202 fs, clone H	5.3
	427061	AB032971	Hs.173392	KIAA1145 protein	5.3
	413841	M34276	Hs.75578	plasminogen	5.3
80	432358	AJ093491	Hs.72830	ESTs	5.2
	416805	F13271	Hs.79981	Human clone Z3560 mRNA sequence	5.2
	438475	W03856	Hs.13188	ESTs, Highly similar to Gene product wil	5.2
	443305	AJ050693	Hs.133018	ESTs	5.2
	413930	M86153	Hs.75618	RAB11A, member RAS oncogene family	5.1
	451859	H44491	Hs.252938	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.1
	429826	N93266	Hs.40747	ESTs	5.1
	436032	AA150797	Hs.109276	latexin protein	5.1



447081	Y13896	Hs.17287	potassium inwardly-rectifying channel, s	5.1
438297	AW515196	Hs.258238	ESTs, Moderately similar to ALU1_HUMAN A	5.1
421126	M74587	Hs.102122	insulin-like growth factor binding prote	5.1
440238	AW451970	Hs.155644	paired box gene 2	5.1
426651	AU076646	Hs.171683	nuclear receptor subfamily 1, group H, m	5.0
425813	AA364138	Hs.210553	ESTs, Weakly similar to hypothetical pro	5.0
432328	AI572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	5.0
430682	AW971949	Hs.291252	ESTs	5.0
410049	AW579475		gb:RC0-DT0076-110100-031-d10 DT0076 Homo	5.0
429222	AI457692	Hs.99164	ESTs	5.0
446317	AI287367	Hs.150906	ESTs	5.0
409506	NM_006153	Hs.54589	NCK adaptor protein 1	5.0
407768	AW002841	Hs.29475	ESTs	5.0
437938	AI950087		gb:hw05c02.x1 NCI_CGAP_Kd12 Homo sapien	5.0
430403	AF039390	Hs.241382	tumor necrosis factor (ligand) superfam	4.9
426215	AW963419	Hs.155223	stanniocalcin 2	4.9
448570	AI923944	Hs.30913	ESTs	4.9
445034	AW293376	Hs.160323	ESTs	4.9
410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	4.8
453891	AB037751	Hs.36353	Homo sapiens mRNA full length insert cDN	4.8
448492	AW340048	Hs.293188	ESTs	4.8
446417	AI299050		gb:qn14d12.x1 NCI_CGAP_Lu5 Homo sapien	4.8
409578	BE041366		gb:hk88c02.x1 NCI_CGAP_Lu21 Homo sapien	4.8
447269	NM_004861	Hs.17958	cerebroside (3'-phosphoadenylylsulfate):g	4.8
413795	AL040178	Hs.142003	ESTs	4.8
422357	AF016272	Hs.115418	cadherin 16, KSP-cadherin	4.8
452208	AA024792	Hs.31895	ESTs, Weakly similar to B9 [H.sapien]	4.7
422711	D60641	Hs.21739	Homo sapiens mRNA; cDNA DKFZp5861518 (f	4.7
441392	AW451831	Hs.222119	ESTs, Weakly similar to K1CQ_HUMAN KERAT	4.7
439221	AA737106	Hs.32250	ESTs	4.7
431956	AK002032	Hs.272245	Homo sapiens cDNA FLJ11170 fs, clone PL	4.7
417355	D13168	Hs.82002	endothelin receptor type B	4.7
414700	H63202	Hs.38163	ESTs	4.7
402739				4.6
403170				4.6
443486	NM_003428	Hs.9450	zinc finger protein 84 (HPF2)	4.6
408380	AF123050	Hs.44532	diubiquitin	4.6
427899	AA829286	Hs.181062	serum amyloid A1	4.5
446302	AI285848	Hs.149757	ESTs	4.5
414812	X72755	Hs.77367	monokine induced by gamma interferon	4.4
424063	NM_002019	Hs.138671	fms-related tyrosine kinase 1 (vascular	4.4
413384	NM_000401	Hs.75334	exostoses (multiple) 2	4.4
421298	AW172431	Hs.13012	ESTs	4.4
420789	AI670057	Hs.199882	ESTs	4.4
453558	AI417023	Hs.40478	ESTs	4.4
453745	AA952989	Hs.63908	Homo sapiens HSPC316 mRNA, partial cds	4.4
451762	AF222980	Hs.26985	disrupted in schizophrenia 1	4.4
410334	AW979261	Hs.291993	ESTs	4.4
457030	AI301740	Hs.173381	dihydropyrimidinase-like 2	4.4
452194	AI694413	Hs.298262	ESTs, Weakly similar to dJ88J8.1 [H.sapi	4.3
410407	X66839	Hs.63287	carbonic anhydrase IX	4.3
401157				4.3
432004	BE018302	Hs.2894	placental growth factor, vascular endoth	4.3
426866	U02330	Hs.172816	neuregulin 1	4.3
446115	AI733075	Hs.292682	ESTs, Weakly similar to S69913 hyperten	4.3
424704	AI263293	Hs.152096	cytochrome P450, subfamily IIJ (arachido	4.2
446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	4.2
433578	BE336886	Hs.3416	adipose differentiation-related protein	4.2
407065	Y10141		gb:H.sapien DAT1 gene, partial, VNTR.	4.2
407182	AA312551	Hs.230157	ESTs	4.2
416565	AW000960	Hs.44970	ESTs	4.2
442230	BE219088	Hs.279547	ESTs	4.2
440680	AA903098		gb:ok46R08.s1 NCI_CGAP_Lei2 Homo sapien	4.2
413802	AW964490	Hs.32241	ESTs	4.2
438370	AA843242	Hs.48523	ESTs	4.2
432731	R31178	Hs.287820	fibronectin 1	4.2
409745	AA077391		gb:7B14E12 Chromosome 7 Fetal Brain cDNA	4.2
441484	AA935481	Hs.58972	ESTs	4.2
411213	AA876939	Hs.69285	neuropilin 1	4.2
453045	AW418979	Hs.224502	ESTs	4.2
407999	AI126271	Hs.49433	ESTs, Weakly similar to HYPOTHETICAL PRO	4.2
409770	AW499536		gb:U1-HF-BR0p-aj-c-12-0-U1.r1 NIH_MGC_5	4.1
449856	AA203155	Hs.18200	ESTs	4.1
430808	S69377	Hs.247978	T-cell acute lymphocytic leukemia 2	4.1
412872	BE006341		gb:RC2-BN0127-240300-011-b05 BN0127 Homo	4.1
430719	AA488988	Hs.293798	ESTs	4.1
409637	AA323948	Hs.55407	Homo sapiens mRNA; cDNA DKFZp434K0621 (f	4.1
414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	4.1
444670	H58373	Hs.37494	ESTs	4.1
448090	AI608821	Hs.270289	ESTs	4.1
408830	AK001709	Hs.48403	hypothetical protein FLJ10847	4.1
419088	AI538323	Hs.77496	small nuclear ribonucleoprotein polypept	4.1
416555	AW968613	Hs.79428	BCL2/adenovirus E1B 19kD-interacting pro	4.1

	436772	AW975688	Hs.250867	zona pellucida glycoprotein 3A (sperm re	4.1
	442556	AL137761	Hs.8379	Homo sapiens mRNA; cDNA DKFZp586L2424 (f	4.1
	459595	AL040421		gb:DKFZp434B0714_r1 434 (synonym: hies3)	4.1
5	438859	AI559626	Hs.164973	ESTs, Weakly similar to AF231024.1 proto	4.0
	423279	AW959861	Hs.290943	ESTs	4.0
	441592	AW137071	Hs.127211	ESTs	4.0
	411836	AW901879		gb:QV0-NN1021-280400-212-410 NN1021 Homo	4.0
	426384	AI472078		gb:85h03.x1 Soares_NSF_F8_9W_OT_PA_P_S	4.0
10	412494	AL133900	Hs.792	ADP-ribosylation factor domain protein 1	4.0
	413583	AL120806	Hs.5888	ESTs	4.0
	415610	L44319		gb:HUMEST1010 Human thymus NSTH II Homo	4.0
	430009	AA894564	Hs.22242	ESTs	4.0
	449539	W80363	Hs.58446	ESTs	4.0
	438929	AW195515	Hs.253177	ESTs	4.0
15	416000	R82342	Hs.79856	ESTs	4.0
	429616	AI982722	Hs.120845	ESTs	4.0
	458471	AV648609	Hs.194240	ESTs	4.0
	453195	BE241876	Hs.32352	hypothetical protein DKFZp434K1210	4.0
20	459046	AA910339	Hs.26216	Homo sapiens cDNA: FLJ22811 fs, clone K	3.9
	438177	BE327015	Hs.281391	ESTs	3.9
	422438	AA445925	Hs.270896	ESTs	3.9
	450382	AA397658	Hs.60257	Homo sapiens cDNA FLJ13598 fs, clone PL	3.9
	449611	AI970394	Hs.197075	ESTs	3.9
25	452030	AL137578	Hs.27607	Homo sapiens mRNA; cDNA DKFZp564N2464 (f	3.9
	452881	AW135220	Hs.241921	ESTs	3.9
	414729	BE466928	Hs.281901	ESTs	3.9
	428816	AA004986	Hs.193852	ATP-binding cassette, sub-family C (CFTR	3.9
	405908				3.8
30	445452	H92975	Hs.246048	ESTs, Weakly similar to RET1_HUMAN RETIN	3.8
	447961	W32791	Hs.170405	ESTs	3.8
	445639	AI016826	Hs.132501	ESTs	3.8
	401189				3.8
	429548	AW138872	Hs.135288	ESTs	3.8
35	431523	N55759	Hs.163674	ESTs	3.8
	430014	H59354	Hs.182485	actinin, alpha 4	3.8
	429250	H56585	Hs.198308	tryptophan rich basic protein	3.8
	451988	AF263928	Hs.27410	papillomavirus regulatory factor PRF-1	3.8
	437939	AW298600	Hs.141840	ESTs, Weakly similar to S59501 interfero	3.8
40	427510	Z47542	Hs.179312	small nuclear RNA activating complex, po	3.8
	433522	AI821730	Hs.116524	ESTs	3.8
	443843	AW878864	Hs.13528	Homo sapiens cDNA FLJ14054 fs, clone HE	3.7
	407305	AA715284		gb:mv35f03.r1 NCI_CGAP_Br5 Homo sapiens	3.7
	434613	AI821826	Hs.187786	ESTs, Moderately similar to ALUB_HUMAN I	3.7
45	410276	AI554545	Hs.68301	ESTs	3.7
	422504	AA311407		gb:EST182187 Jurkat T-cells V Homo sapie	3.7
	421013	M62397	Hs.1345	mutated in colorectal cancers	3.7
	437949	U78519	Hs.41654	ESTs	3.7
	431840	AA534908	Hs.2860	POU domain, class 5, transcription facto	3.7
50	409446	AI561173	Hs.67688	ESTs	3.7
	415263	AA948033	Hs.130853	ESTs	3.7
	450206	AI796450	Hs.201600	ESTs	3.7
	439444	AI277652	Hs.54578	ESTs	3.7
	437828	AW976806	Hs.291805	ESTs	3.7
55	453238	AA033991	Hs.269234	ESTs	3.7
	420041	AB005142	Hs.94592	kltho	3.7
	448458	AW614367	Hs.171054	ESTs	3.7
	435080	AI831760	Hs.155111	ESTs	3.7
	444249	T87398	Hs.205816	ESTs	3.7
60	426595	AW971980	Hs.62402	p21/Cdc42/Rac1-activated kinase 1 (yeast	3.7
	417715	AW969587	Hs.86366	ESTs	3.7
	432579	AF043244	Hs.278439	nucleolar protein 3 (apoptosis repressor	3.6
	440048	AA897461	Hs.158469	ESTs, Weakly similar to envelope protein	3.6
	430091	AB032958	Hs.233023	KIAA1132 protein	3.6
65	438030	X98427	Hs.122634	ESTs	3.6
	453496	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	3.6
	446636	AC002563	Hs.15767	citron (rho-interacting, serine/threonin	3.6
	417860	AW408557	Hs.235498	Homo sapiens cDNA FLJ14075 fs, clone HE	3.6
	435794	H72108	Hs.13704	ESTs	3.6
70	449695	AA164569	Hs.34550	ESTs	3.6
	411485	AW848125		gb:IL3-CT0214-301299-048-G04 CT0214 Homo	3.6
	426274	D38122	Hs.2007	tumor necrosis factor (ligand) superfam	3.6
	458201	AI989961	Hs.233477	ESTs, Moderately similar to A Chain A, S	3.6
	440987	AA911705	Hs.130229	ESTs	3.6
75	425178	H16097	Hs.161027	ESTs	3.6
	419080	AW150835	Hs.18878	hypothetical protein FLJ21620	3.6
	436091	AA704705	Hs.181044	ESTs, Weakly similar to A Chain A, Human	3.6
	452671	AW861074	Hs.225833	ESTs	3.6
	437222	AL117588	Hs.299963	ESTs	3.6
80	437809	AL137723	Hs.5855	Homo sapiens mRNA; cDNA DKFZp434D0818 (f	3.5
	411545	AW850818		gb:IL3-CT0220-091199-026-A03 CT0220 Homo	3.5
	414799	AI752416	Hs.77326	insulin-like growth factor binding prote	3.5
	439862	AA847856	Hs.124565	ESTs	3.5
	419229	AI827237	Hs.282884	ESTs	3.5

5	431889	AA521277	Hs.124946	ESTs	3.5
	422660	AW297582	Hs.237062	ESTs	3.5
	415122	D60708	Hs.22245	ESTs	3.5
	444127	N63620	Hs.13281	ESTs	3.5
	416913	AW934714		gb:RC1-DT0001-031299-011-a11 DT0001 Homo	3.5
	409044	AI129586	Hs.33033	ESTs	3.5
	453365	AA035211	Hs.17404	ESTs	3.5
	452355	N54926	Hs.29202	G protein-coupled receptor 34	3.5
10	423246	AL119114	Hs.23107	ESTs	3.5
	434131	A1858275	Hs.143659	ESTs	3.5
	425304	AA463844	Hs.31339	fibroblast growth factor 11	3.5
	453775	NM_002916	Hs.35120	replication factor C (activator 1) 4 (37	3.4
	426559	AB001914	Hs.170414	paired basic amino acid cleaving system	3.4
15	456311	AA225632	Hs.190016	ESTs	3.4
	420737	L08096	Hs.99899	tumor necrosis factor (ligand) superfamily	3.4
	448733	NM_005629	Hs.187958	solute carrier family 6 (neurotransmitter)	3.4
	401811				3.4
	404021				3.4
20	447175	AJ365208	Hs.293606	ESTs	3.4
	453743	AL120480		gb:DKFZp761K058_r1 761 (synonym: hamy2)	3.4
	455070	AW854675		gb:MR1-CT0258-290300-206-a01 CT0258 Homo	3.4
	419546	AA244199		gb:nc06c05.s1 NCI_CGAP_Pr1 Homo sapiens	3.4
	449441	AJ656040	Hs.196532	ESTs	3.4
25	441606	R37263	Hs.21065	ESTs	3.4
	446594	AJ311917	Hs.16292	ESTs	3.4
	424664	A432572	Hs.164221	ESTs	3.4
	413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	3.4
	427914	AA417350	Hs.20575	ESTs	3.4
30	438257	AW474419	Hs.224794	ESTs	3.4
	412642	BE244598	Hs.809	hepatocyte growth factor (hepatopoietin A;	3.4
	454690	AW854639		gb:MR1-CT0258-140100-203-a10 CT0258 Homo	3.3
	428046	AW812795	Hs.155381	ESTs, Moderately similar to I38022 hypot	3.3
	407331	AJ570416	Hs.99910	phosphofructokinase, platelet	3.3
35	440472	AA886169	Hs.169071	ESTs	3.3
	421893	NM_001078	Hs.109225	vascular cell adhesion molecule 1	3.3
	403797				3.3
	417924	AU077231	Hs.62932	cyclin D1 (PRAD1; parathyroid adenomas	3.3
	410623	AW958932	Hs.293833	ESTs	3.3
40	449338	H73444	Hs.394	adrenomedullin	3.3
	441024	AW081530	Hs.137088	ESTs	3.3
	405257				3.3
	450396	AU077002	Hs.24950	regulator of G-protein signalling 5	3.3
	416892	L24498	Hs.80409	growth arrest and DNA-damage-inducible,	3.3
45	444471	AB020684	Hs.11217	KIAA0877 protein	3.3
	431689	AA305688	Hs.267695	UDP-Gal:betaGlcNAc:beta 1,3-galactosyltr	3.3
	452093	AA447453	Hs.27860	Homo sapiens mRNA; cDNA DKFZp586M0723 (f	3.3
	425235	AW067900	Hs.155223	stanniocalcin 2	3.3
	428824	W23624	Hs.173059	ESTs	3.2
50	450101	AV649989	Hs.24385	Human hbc647 mRNA sequence	3.2
	425260	L47726	Hs.1870	phenylalanine hydroxylase	3.2
	443830	AJ142095	Hs.143273	ESTs	3.2
	415245	N59650	Hs.27252	ESTs	3.2
	405953				3.2
55	430812	L10405	Hs.247992	DNA binding protein for surfactant prote	3.2
	418946	AJ798841	Hs.132103	ESTs	3.2
	424750	D29956	Hs.152818	ubiquitin specific protease 8	3.2
	435342	AW979168	Hs.163270	ESTs	3.2
	458860	AW873557	Hs.212739	ESTs	3.2
60	430172	AA468591	Hs.161889	ESTs	3.2
	431842	NM_005764	Hs.271473	epithelial protein up-regulated in carci	3.2
	451221	AJ949701	Hs.210589	ESTs	3.2
	436211	AK001581	Hs.80961	polymerase (DNA directed), gamma	3.2
	433727	C16221	Hs.112608	ESTs	3.2
65	424897	D63216	Hs.153684	frizzled-related protein	3.2
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	3.1
	418030	BE207573	Hs.83321	neuromedin B	3.1
	417919	AJ928203	Hs.86379	ESTs	3.1
	430437	AJ768801	Hs.169943	Homo sapiens cDNA FLJ13569 fls, clone PL	3.1
70	409663	AJ743750	Hs.65862	ESTs	3.1
	454024	AA993527	Hs.16281	hypothetical protein FLJ23403	3.1
	424980	L42172	Hs.154078	lipopolysaccharide-binding protein	3.1
	421633	AF121860	Hs.106260	sorting nexin 10	3.1
	436002	R68529	Hs.120967	ESTs	3.1
75	437682	AA476652	Hs.94952	Homo sapiens cDNA: FLJ23371 fls, clone H	3.1
	439451	AF086270	Hs.278554	heterochromatin-like protein 1	3.1
	430183	BE010038		gb:PM3-BN0176-100400-001-g04 BN0176 Homo	3.1
	428479	Y00272	Hs.184572	cell division cycle 2, G1 to S and G2 to	3.1
	441285	NM_002374	Hs.167	microtubule-associated protein 2	3.1
80	456386	W28481		gb:47e1 Human retina cDNA randomly prime	3.1
	451130	AJ762250	Hs.211347	ESTs	3.1
	439702	AW085525	Hs.134182	ESTs	3.1
	453331	AJ240665	Hs.8895	ESTs	3.1
	428841	AJ418430	Hs.104935	ESTs	3.1

5	449899	AW10700	Hs.103280	ESTs	3.1
	436009	HS7130	Hs.120925	ESTs	3.1
	448966	AW372914	Hs.287462	Homo sapiens cDNA FLJ11875 fs, clone HE	3.1
	408239	AA053401	Hs.271827	ESTs, Moderately similar to ALU7_HUMAN A	3.1
	418526	BE019020	Hs.85838	solute carrier family 16 (monocarboxylic	3.1
10	401260				3.1
	450705	U90304	Hs.25351	Iroquois-class homeodomain protein	3.1
	447233	AW246333	Hs.17901	Homo sapiens cDNA: FLJ21974 fs, clone H	3.1
	424415	NM_001975	Hs.146580	enolase 2, (gamma, neuronal)	3.0
	403346				3.0
15	446319	AW207590	Hs.160711	ESTs	3.0
	432757	AF113013	Hs.278919	PRO0806 protein	3.0
	407921	AJ378617	Hs.23100	Homo sapiens cDNA FLJ12592 fs, clone NT	3.0
	414618	AJ204600	Hs.96978	ESTs	3.0
	434398	AA121098	Hs.3838	serum-inducible kinase	3.0
20	440113	AJ916532	Hs.188272	ESTs	3.0
	424539	LQ2911	Hs.150402	activin A receptor, type I	3.0
	428945	AW192803	Hs.98974	ESTs	3.0
	458297	R54033	Hs.21245	ESTs	3.0
	424405	AW76838	Hs.12967	ESTs	3.0
25	411290	AW835544		gb:QV4-LT0016-271299-068-f03 LT0016 Homo	3.0
	459068	BE464396	Hs.118468	ESTs	3.0
	459065	AJ373532	Hs.157910	ESTs	3.0
	437693	AJ754443	Hs.185951	ESTs	3.0
	429418	AJ381028	Hs.99283	ESTs	3.0
30	406117				3.0
	415492	R41674	Hs.16491	ESTs	3.0
	419854	AW664873	Hs.87836	Homo sapiens PAC clone RPS-1087M19 from	3.0
	453688	AW381270	Hs.194110	Homo sapiens mRNA: cDNA DKFZp434C0814 (I	3.0
	408119	W26213		gb:22d10 Human retina cDNA randomly prim	3.0
35	438358	AL035992	Hs.210278	ESTs	3.0
	412372	R65998	Hs.118615	ESTs	3.0
	431984	AL080239	Hs.272284	Human DNA sequence from clone GS1-256022	3.0
	403782				3.0
	443183	R16258	Hs.6217	Homo sapiens cDNA FLJ12521 fs, clone NT	3.0
40	456388	W28557		gb:48d8 Human retina cDNA randomly prime	3.0
	447922	Z92910	Hs.20019	hemochromatosis	3.0
	428857	AF008192	Hs.194283	putative GRS protein	3.0
	406991	S82185		(NONE)	3.0
	432596	AJ224741	Hs.278461	matrilin 3	3.0
45	453202	AW085781	Hs.26270	Homo sapiens cDNA FLJ11588 fs, clone HE	3.0
	414132	AJ801235	Hs.48480	ESTs	3.0
	409122	W07089	Hs.297873	ESTs	3.0
	405547				3.0
	422219	AW978073		gb:EST390182 MAGE resequences, MAGO Homo	3.0
50	417227	T57776	Hs.191094	ESTs	3.0
	448592	N69546	Hs.141706	ESTs	3.0
	412477	AJ904743	Hs.104650	hypothetical protein FLJ10292	3.0
	400368	BE779978	Hs.69149	proline-serine-threonine phosphatase int	3.0
	455362	AW902635		gb:QV3-NN1024-100500-181-b02 NN1024 Homo	3.0
55	443578	R97191	Hs.134106	ESTs	3.0
	419348	AA236645	Hs.98274	ESTs	3.0
	439138	AJ742605	Hs.193696	ESTs	3.0
	449547	H93543	Hs.117963	ESTs	3.0
	455180	AW863503		gb:MR3-SN0009-180400-110-c12 SN0009 Homo	3.0
60	444228	AV648612	Hs.282396	ESTs	3.0
	423496	U91963	Hs.129700	toll-like 1	3.0
	401707				3.0
	418276	BE165909	Hs.134682	Homo sapiens cDNA: FLJ23161 fs, clone L	3.0
	441677	AW271702	Hs.93739	ESTs	3.0
65	459587	AA031956		gb:zk15e04.s1 Soares_pregnant_uterus_NbH	3.0
	431311	AA502552	Hs.188980	ESTs	3.0
	426326	BE165753	Hs.250528	ESTs, Weakly similar to unnamed protein	3.0
	412685	BE092186		gb:IL2-BT0734-200400-075-H05 BT0734 Homo	3.0
	414752	BE503505	Hs.248689	ESTs	3.0
70	403144				3.0
	407539	X91103		gb:H.sapiens mRNA for Hs44 protein.	3.0
	412379	AW947581		gb:RCO-MT0004-140300-031-d08 MT0004 Homo	3.0
	407937	AW297944	Hs.242811	ESTs	3.0
	456976	AJ681882	Hs.270428	ESTs	3.0
75	417066	AA329572	Hs.172004	titin	3.0
	406007				3.0
	416940	N75620	Hs.43157	ESTs	3.0
	433322	H50621	Hs.134156	ESTs	3.0
	406088				3.0
80	416573	R10356	Hs.18865	ESTs, Weakly similar to AC007228.2 BC372	3.0
	423130	AW897586	Hs.21213	ESTs	3.0
	412721	AW183165	Hs.95600	ESTs	3.0
	418375	NM_003081	Hs.84389	synaptosomal-associated protein, 25kD	3.0
	422992	AF016833	Hs.122785	maltese-glucosylase (alpha-glucosidase)	3.0
	406506				3.0
	413472	BE242870	Hs.75379	solute carrier family 1 (glial high aff	3.0
	422650	D42055	Hs.1565	neural precursor cell expressed, develop	3.0

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5 455362 1284507\_1 AW902635 AW902574 BE011187 BE011329 AW902608 AW902651  
 455711 1352369\_1 BE069465 BE069505  
 456386 1842693\_1 W28481  
 456388 1842839\_1 W28557  
 456411 185688\_1 AA603305 AA244095 AA244183  
 459587 94893\_1 AA031956  
 459595 969956\_1 AL040421

## TABLE 33C:

10 Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 15 NL\_position: Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
401078	3687273	Plus	105052-105171
401157	9438289	Minus	114133-114247,114567-114645
401189	9690246	Minus	90815-90929
401260	8076883	Minus	86008-86355
401352	9931258	Minus	26064-26208
401439	8246737	Plus	92993-94026
401707	2951946	Plus	21972-22104
401811	6730720	Plus	107002-107209
401976	3095020	Minus	17594-17709,21068-21175
402045	7923943	Plus	5964-6128
402421	9786341	Minus	46609-46662,46758-46811,86293-86346,89776-89829,90048-90101,102817-102924
402696	7328818	Minus	23600-23731
402739	9212192	Plus	60456-61019
402921	7981303	Minus	52242-52384,55599-55858,57124-57309,59633-59761,59957-60123
403095	8954339	Plus	150025-150240,151564-151690
403111	8980970	Plus	175012-175159
403144	9454649	Minus	166200-166628
403170	9838134	Plus	40955-41356
403345	8569726	Plus	77890-78069
403346	8569726	Plus	92752-93015
403563	8101139	Plus	2800-3501
403622	8569879	Plus	1941-2388,2580-2761
403782	8078608	Plus	41326-41633
403797	8099896	Minus	123065-125008
403899	7381715	Minus	9144-9350
404021	8655966	Plus	192534-193489
404115	9621489	Plus	232707-232982
404200	6010176	Minus	7066-7210
404347	9838195	Plus	74493-74829
404939	6862697	Plus	175318-175476
405257	7329310	Plus	73121-73273
405336	6094635	Plus	33267-33563
405394	6624123	Minus	31900-32373
405547	1054740	Plus	124361-124520,124914-125050
405609	5757553	Minus	42814-43010,43583-43783,44863-45033,46429-46554,47815-48018,49961-50153,51624-51727,51823-51959,52702-52918,55469-55601,57111-57307,58169-58296,60215-60332,61482-61727
405908	6758795	Plus	97969-98715
405943	6758796	Plus	20605-20812
405953	7960374	Minus	65101-65574
405963	8247786	Plus	4056-4699
406007	8247802	Minus	13484-13829
406030	8312328	Minus	96123-96547
406088	9123919	Minus	65772-66270
406117	9142932	Plus	54304-54584
406242	7417725	Minus	36736-36951
406291	5686274	Plus	9562-9867
406411	9256407	Plus	7400-7527
406414	9256407	Plus	49593-49850
406504	7711360	Minus	107068-107277
406506	7711374	Minus	6843-8077
406598	8248614	Plus	56373-56849

## TABLE 34A: ABOUT 197 GENES UP-REGULATED IN KIDNEY CANCER

70 Table 34A lists about 197 genes up-regulated in kidney cancer compared to normal adult tissues that are likely to be extracellular or cell-surface proteins. These were selected as for Table 33A and the predicted protein contained a structural domain that is indicative of extracellular localization (e.g. ig, fn3, egi, 7tm domains). Predicted protein domains are noted.

75 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenetID: Unigene number  
 Unigene Title: Unigene gene title  
 PSDomain: Protein Structural Domain  
 R1: Ratio of tumor to normal tissue

Pkey	ExAccn	UnigenetID	Unigene Title	PSDomain	R1
421471	U90545	Hs.104635	solute carrier	TM,SS	1007.4
452401	NM_007115	Hs.29352	tumor necrosis	TM,SS,Xlink,CUB	336.4
421727	Y13153	Hs.107318	kyurenine 3-mo	TM,SS,Monooxygenase	323.6

5	426471	M22440	Hs.170009	transforming gr	TM,SS,EGF	224.6
	441031	A1110684	Hs.7645	fibrinogen, B b	fibrinogen_C	174.0
	411642	NM_014932	Hs.71132	neuroglin 1	TM,SS,COesterase	172.4
	452838	U65011	Hs.30743	preferential	TM	161.4
	425984	AW836277	Hs.165636	hypothetical pr	TM	151.0
	453165	S74727	Hs.32042	aspartoacylase	TM	134.8
	452431	U88879	Hs.29499	tol-4-like recep	TM,SS,TIR,LRRCCT	130.6
	423508	AW604287	Hs.129711	hepatitis A vir	TM,SS,Ig	120.4
10	407975	X89426	Hs.41716	endothelial cel	SSJGFBP	111.8
	415076	NM_000857	Hs.77890	guanylate cycl	TM,guanylate_cyc	97.0
	447046	AA326187	Hs.17170	G protein-coupl	TM,7tm_1	90.2
	423109	M59305	Hs.123655	natriuretic pep	TM,SS,ANF_receptor	78.0
	422544	AB018259	Hs.118140	KIAA0716 gene p	TM	74.8
15	429352	AK001512	Hs.200097	hypothetical pr	TM	73.0
	453392	U23752	Hs.32964	SRY (sex determ	TM,HMG_box	72.2
	403345				TM,alpha-amylase	69.6
	430440	X52599	Hs.2561	nerve growth fa	TM,SS,NGF	69.0
	408609	AA330431	Hs.640	calcitonin rece	TM,SS,7tm_2	57.4
20	449101	AA205847	Hs.23016	G protein-coupl	TM,7tm_1	52.0
	423685	BE350494	Hs.49753	Homo sapiens mR	TM,Myosin_tail	48.0
	452891	N75582	Hs.212875	ESTs, Weakly si	SS	44.0
	408430	S79876	Hs.44926	dipeptidylpepti	TM,SS,OPPIV_N_term,Peptidase_S9	42.6
	419287	X91906	Hs.89872	chloride channe	TM,C8S,voltage_CLC	40.6
25	428822	W28418	Hs.301148	potassium volta	TM	40.2
	434208	T92641	Hs.127648	hypothetical pr	TM,SS	39.2
	400792	AA635062	Hs.50094	Homo sapiens mR	TM,BIR,CARD_zf-C3HC4	38.6
	444743	AA045648	Hs.11817	nudix (nucleosi	TM,nut	38.4
	406411				TM,vwa,FG-GAP	37.6
30	423657	AL045128	Hs.1691	glucan (1,4-alp	TM,alpha-amylase	37.5
	424871	NM_004525	Hs.153595	low density lip	TM,SS,EGF,kd_receptL_a,kd_receptL_b	32.8
	449625	NM_014253	Hs.23796	odx (odd Oz/ten	SH2,EGF	30.5
	423020	AA383092	Hs.1608	replication pro	TM	29.6
	422420	U03398	Hs.1524	tumor necrosis	TM,TNF	29.6
35	414245	BE148072	Hs.75850	WAS protein fam	TM,WH2	28.8
	410247	AF181721	Hs.61345	RU2S	TM	27.4
	406414				TM,vwa,FG-GAP	27.2
	435951	AF269162	Hs.41267	c21orf7 form A..	TM	27.2
	419948	AB041035	Hs.93847	NADPH oxidase 4	TM,SS,Ferric_reduct	26.4
40	448595	AB014544	Hs.21572	KIAA0644 gene p	TM,SS,LRRCCT,LR	25.8
	419569	AB971651	Hs.91143	jagged 1 (Alagi	TM,SS,DSLEGF	25.6
	433242	AB040938	Hs.113940	KIAA1505 protei	SS	25.6
	416778	M16505	Hs.79876	steroid sulfata	TM,Sulfatase	23.0
	401352				TM	22.6
45	404200				SS	19.6
	446591	H44186	Hs.15456	PDZ domain cont	TM,PDZ	19.2
	431806	AF186114	Hs.270737	tumor necrosis	TM,SS	18.0
	423909	AJ223183	Hs.135194	immunoglobulin	TM,SS,Ig	17.6
	446364	AB006624	Hs.14912	KIAA0286 protei	TM	17.4
50	425695	NM_005401	Hs.159238	protein tyrosin	TM,Band_41_V_phosphatase	17.0
	410947	AK000305	Hs.67055	hypothetical pr	TM	16.8
	421002	AF116030	Hs.100932	transcription f	TM,KRAB_zf-C2H2	16.5
	421659	NM_014459	Hs.106511	protocadherin 1	TM,SS,cadherin	16.0
	458679	AW975460	Hs.143583	ESTs	SS	14.4
55	406598				SS	13.6
	428508	BE252383	Hs.184668	SBB131 protein	TM,PX	13.2
	423321	AB013885	Hs.126926	beta-ureidoprop	TM,SS,CN_hydrolase	12.5
	422317	NM_001147	Hs.115181	angiotensin 2	fibrinogen_C	12.2
	428227	AA321649	Hs.2248	small inducible	IL8	12.0
60	414923	AW445008	Hs.77637	homeo box A4	TM,homeobox	11.9
	433231	AB040926	Hs.143552	KIAA1493 protei	SS	11.6
	443672	AA323362	Hs.9667	butyrobetaine (	TM	11.4
	405609				TM,Myosin_tail,myosin_head	11.4
	418912	NM_000685	Hs.89472	angiotensin rec	TM,7tm_1	11.4
65	449802	AW901804	Hs.23984	hypothetical pr	TM	11.2
	404347				SS	10.8
	429945	NM_006729	Hs.226483	diaphanous (Dro	TM,FH2	10.6
	435085	AW130284	Hs.192752	ESTs, Moderate	TM	10.6
	404115				SS	10.2
70	420757	X78592	Hs.99915	androgen recept	TM,Androgen_recep,hormone_rec,zf-C4	10.2
	446298	AF187813	Hs.14637	kidney- and liv	TM,Acetyltransf	10.1
	433703	AA210863	Hs.3532	nemo-like kinas	TM,pkinase	9.2
	417404	NM_007350	Hs.82101	pleckstrin homo	TM	9.2
	451621	AB79148	Hs.26770	fatty acid bind	TM,SS,lipocain	9.2
75	402045				TM,SS	9.0
	403095				SS,PAX,homeobox	8.8
	401439				TM	8.6
	407721	Y12735	Hs.38018	dual-specificit	TM,pkinase	8.4
	402921				TM	8.4
80	419503	AA243642	Hs.137422	ESTs	TM	8.4
	452259	AA317439	Hs.28707	signal sequence	TM	8.4
	402696				TM	8.3
	450001	NM_001044	Hs.406	solute carrier	TM,SS,SNF	8.1
	433190	M26901	Hs.3210	renin	SS,asp	7.8

449444	AW818436	Hs.23590	solute carrier	TM,MCT	7.7
444042	NM_004915	Hs.10237	ATP-binding cas	TM,ABC_tran	7.7
452883	X80031	Hs.150318	ESTs	TM,C4,Collagen	7.4
425151	AA351814	Hs.298678	ESTs	TM	7.2
455068	AI807894	Hs.27910	centrosomal pro	TM,SS	7.2
406504				TM	7.2
410274	AA381807	Hs.61762	hypoxia-inducib	SS	7.0
423349	AF010258	Hs.127428	homeo box A9	TM,homeobox	6.8
408771	AW732573	Hs.47584	potassium volta	TM,K_1etra,ion_trans	6.8
445575	Z25368	Hs.172004	tin	TM	6.6
415138	C18356	Hs.78045	tissue factor p	Kunitz_BPTI,G-gamma	6.3
443595	AF169312	Hs.9613	PPAR(gamma) ang	TM,SS,fbnogen_C	6.3
404939				TM	6.3
436209	AW850417	Hs.254020	ESTs, Moderat	TM,SS	6.2
403111				TM	6.2
405394				TM	6.0
454392	BE260893		gb:601150677F1	TM,SS	6.0
415910	U20350	Hs.78913	chemokine (C-X3	TM,7tm_1	5.9
402421				TM	5.8
425717	X07282	Hs.171495	retinoic acid r	TM,hormone_rec,zf-C4	5.7
427920	Z11502	Hs.181107	annexin A13	TM,annexin	5.6
407864	AF069291	Hs.40539	chromosome 8 op	TM,FHA,BRCT	5.5
441006	AW605267	Hs.7627	CGI-60 protein	TM	5.4
422232	D43945	Hs.113274	transcription f	TM,HLH	5.4
425782	U66468	Hs.159525	cell growth reg	SS	5.3
450236	AW162998	Hs.24684	KIAA1376 protei	TM,SS	5.3
413841	M34276	Hs.75576	plasminogen	SS,trypsin,trypsin,PAN	5.3
436032	AA150797	Hs.109276	lactad protein	TM	5.1
447081	Y13896	Hs.17287	potassium inward	TM,IRK	5.1
421126	M74587	Hs.102122	insulin-like gr	SS,thyroglobulin_1,IGFBP	5.1
426651	AU076848	Hs.171683	nuclear recepto	TM,zf-C4,hormone_rec	5.0
432328	AI572739	Hs.195471	6-phosphofructo	TM,6PF2K,PGAM	5.0
409506	NM_006153	Hs.54589	NCK adaptor pro	TM,SH2,SH3	5.0
410361	BE391804	Hs.62661	guanylate bindi	TM,SS,GBP	4.8
453891	AB037751	Hs.36353	Homo sapiens mR	TM	4.8
447269	NM_004861	Hs.17958	cerebroside (3	TM,SS	4.8
422357	AF016272	Hs.115418	cadherin 16, KS	TM,cadherin	4.8
417355	D13168	Hs.82002	endothelin rece	TM,SS,7tm_1,zf-C3HC4	4.7
402739				SS	4.6
443486	NM_003428	Hs.9450	zinc finger pro	TM,KRAB,zf-C2H2	4.6
408380	AF123050	Hs.44532	diubiquitin	TM,ubiquitin,7tm_3,ANF_receptor,sushi,7tm_1	4.6
414812	X72755	Hs.77367	monokine induce	SS,IL8	4.4
424063	NM_002019	Hs.138671	tns-related tyr	TM,SS,kinase,ig	4.4
413384	NM_000401	Hs.75334	exostoses (mult	TM	4.4
457030	AJ301740	Hs.173381	dihydropyrimidi	TM,SS,Dihydroorotase	4.4
410407	X66839	Hs.63287	carbonic anhydr	TM,SS,carb_anhydrase	4.3
401157				TM,citrate_synth	4.3
432004	BE018302	Hs.2894	placental growt	SS,POGF	4.3
424704	AI263293	Hs.152096	cytochrome P450	SS,p450	4.2
407065	Y10141		gb:H.sapiens DA	TM,SS,SNF	4.2
411213	AA676939	Hs.69285	neurogranin 1	TM,CUB,F5_F8_type_C,MAM	4.2
430806	S69377	Hs.247978	T-cell acute ly	TM,HLH	4.1
414596	AF002020	Hs.76918	Niemann-Pick di	TM,SS,Patched	4.1
408830	AK001709	Hs.48403	hypothetical pr	TM,UPF0013	4.1
416655	AW968813	Hs.79428	BCL2/adenovirus	TM	4.1
412494	AL133900	Hs.792	ADP-ribosylatio	TM,arf,zf-B_box,zf-C3HC4	4.0
453195	BE241876	Hs.32352	hypothetical pr	TM	4.0
428816	AA004986	Hs.193852	ATP-binding cas	TM,ABC_membrane,ABC_tran,COX15-CtaA	3.9
401189				TM,SET,PHD,HMG_box	3.8
451988	AF263928	Hs.27410	papillomavirus	TM	3.8
421013	M62397	Hs.1345	mutated in colo	TM	3.7
420041	AB005142	Hs.94592	lotho	TM,SS,Glyco_hydro_1	3.7
432579	AF043244	Hs.278439	nucleolar prote	TM	3.6
453496	AA442103	Hs.33084	solute carrier	TM,SS,sugar_tr	3.6
446636	AC002563	Hs.15767	citron (rho-int	TM,CNH,DAG_PE-bind,PH,kinase,kinase_C	3.6
426274	D38122	Hs.2007	tumor necrosis	TM,TNF	3.6
452355	N54928	Hs.29202	G protein-coupl	TM,7tm_1	3.5
453775	NM_002916	Hs.35120	replication fac	TM,SS,AAA	3.4
426559	AB001914	Hs.170414	paired basic am	TM,Peptidase_S8,P	3.4
420737	L08098	Hs.99899	tumor necrosis	TM,TNF	3.4
448733	NM_005629	Hs.187958	solute carrier	TM,SNF,ABC_tran,Isodh,kinase,Ribosomal_L18ae	3.4
413719	BE439580	Hs.75498	small inducible	SS,IL8	3.4
427914	AA417350	Hs.20575	ESTs	TM,GAS2	3.4
412642	BE244598	Hs.809	hepatocyte grow	trypsin,PAN,trypsin	3.4
421893	NM_001078	Hs.109225	vascular cell a	TM,SS,ig	3.3
417924	AU077231	Hs.82932	cyclin D1 (PRAD	TM,cyclin	3.3
405257				TM	3.3
450396	AU077002	Hs.24950	regulator of G-	TM,RGS	3.3
416892	L24498	Hs.80409	growth arrest a	TM,Ribosomal_L7Ae	3.3
425236	AW067800	Hs.155223	stanniocalcin 2	SS	3.3
430812	L10405	Hs.247992	DNA binding pro	TM,SS	3.2
431842	NM_005764	Hs.271473	epithelial prot	TM,SS	3.2
424897	D63216	Hs.153684	fizzled-relate	TM,Fz,NTR	3.2



5	414821	M63835	Hs.77424	Fc fragment of	TM,SS,Ig	3.1
	418030	BE207573	Hs.83321	neuromedin B	SS	3.1
	421633	AF121860	Hs.106260	sorting nexin 1	TM,PX	3.1
	441285	NM_002374	Hs.167	microtubule-actin	SS,tubulin-binding	3.1
	418526	BE019020	Hs.85838	solute carrier	TM,MCT	3.1
	401260				TM,SS	3.1
	450705	U90304	Hs.25351	iroquois-class	TM/homeobox	3.1
	424415	NM_001975	Hs.146580	enolase 2, (gam	TM,SS,enolase	3.0
	403346				TM,alpha-amylase	3.0
10	432757	AF113013	Hs.278919	PRO0806 protein	TM	3.0
	434398	AA121098	Hs.3838	serum-inducible	TM,kinase,POLO_box	3.0
	424539	L02911	Hs.150402	activin A recep	TM,Activin_recpt,kinase	3.0
	406117				SS	3.0
15	408119	W26213		gb:22d10 Human	TM,SS	3.0
	431884	AL080239	Hs.272284	Human DNA seque	TM	3.0
	403782				TM	3.0
	447922	Z92910	Hs.20019	hemochromatosis	TM,SS,Ig,MHC_I,histone,SPRY_zf-B_box,zf-C3HC4	3.0
	428857	AF008192	Hs.194283	putative GR6 pr	SS	3.0
20	432596	AJ224741	Hs.278461	matrilin 3	SS	3.0
	453202	AW085781	Hs.26270	Homo sapiens cD	TM	3.0
	405547				TM,SS,ABC_membrane,ABC_tran	3.0
	423496	U91963	Hs.129700	totfold-Bta 1	TM,SS,EGF,CUB,Astacin	3.0
	401707				SS	3.0
	403144				TM,ion_trans,K_tetra	3.0
25	418375	NM_003081	Hs.84389	synaptosomal-as	TM,NA	3.0
	422992	AF016833	Hs.122785	maltase-glucoam	TM,Glyco_hydro_31,trefol	3.0
	405506				TM	3.0
	413472	BE242870	Hs.75379	solute carrier	TM,SDF	3.0

30	TABLE 34B:		
	Pkey:	Unique Eos probeset identifier number	
	CAT number:	Gene cluster number	
	Accession:	Genbank accession numbers	

35	Pkey	CAT number	Accession
	408119	1040172_1	W26213 H08055 Z44031 AW954559 R17434
	454392	115882_1	BE260893 AA078319 R85057 AW803024 H85811 AA078293

40	TABLE 34C:		
	Pkey:	Unique number corresponding to an Eos probeset	
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.	
	Strand:	Indicates DNA strand from which exons were predicted.	
	NL_position:	Indicates nucleotide positions of predicted exons.	

45	Pkey	Ref	Strand	NL_position
	401157	9438289	Minus	114133-114247,114567-114645
	401189	9690246	Minus	90815-90929
50	401260	8076883	Minus	86008-86355
	401352	9931258	Minus	26064-26208
	401439	8246737	Plus	92993-94026
	401707	2951946	Plus	21972-22104
	402045	7923943	Plus	5964-6128
55	402421	9796341	Minus	46609-46662,46758-46811,86293-86346,89776-89829,90048-90101,102817-102924
	402696	7328818	Minus	23600-23731
	402739	9212192	Plus	60458-61019
	402921	7981303	Minus	52242-52384,55599-55858,57124-57309,59633-59761,59957-60123
	403095	8954339	Plus	150025-150240,151564-151690
60	403111	8980970	Plus	175012-175159
	403144	9454649	Minus	166200-166528
	403345	8569726	Plus	77890-78069
	403346	8569726	Plus	92752-93015
	403782	8078608	Plus	41326-41633
65	404115	9621489	Plus	232707-232982
	404200	6010176	Minus	7066-7210
	404347	9838195	Plus	74493-74829
	404939	6882697	Plus	175318-175476
	405257	7329310	Plus	73121-73273
70	405394	6624123	Minus	31900-32373
	405547	1054740	Plus	124361-124520,124914-125050
	405609	5757553	Minus	42814-43010,43583-43783,44863-45033,46429-46554,47815-48018,49961-50153,51624-51727,51823-51959,52702-52918,55469-55601,57111-57307,58169-58296,60215-60332,61482-61727
	406117	9142932	Plus	54304-54584
	406411	9256407	Plus	7400-7527
75	406414	9256407	Plus	49593-49850
	406504	7711360	Minus	107068-107277
	406506	7711374	Minus	6843-8077
	406598	8248614	Plus	56373-56849

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TABLE 35A: ABOUT 532 GENES UP-REGULATED IN KIDNEY CANCER

Table 35A lists about 532 genes up-regulated in kidney cancer compared to normal kidney. These were selected as for Table 33A except using an "average" of the 70th percentile for both the numerator and the denominator and using non-malignant kidney specimens in determining the denominator value.

	Prkey:	Unique Eos probaset identifier number	
	ExAccn:	Exemplar Accession number, Genbank accession number	
	UnigeneID:	Unigene number	
	Unigene Title:	Unigene gene title	
5	R1:	Ratio of tumor to normal tissue	
	Prkey	ExAccn	UnigeneID
	424704	A0263293	Hs.152096
	426559	AB001914	Hs.170414
10	458079	A1796870	Hs.54277
	433447	U29195	Hs.3281
	439979	AW600291	Hs.6823
	448921	AB012113	Hs.15530
	435359	T60843	Hs.189679
15	450152	A1138635	Hs.22968
	452401	NM_007115	Hs.29352
	440304	BE159984	Hs.125395
	414821	M63835	Hs.77424
	421155	H87879	Hs.102267
20	452795	AW392555	Hs.18878
	414812	X72755	Hs.77367
	426471	M22440	Hs.170009
	427897	NM_017413	Hs.181060
	449523	NM_000579	Hs.54443
25	436961	AW375974	Hs.156704
	447499	AW262580	Hs.147674
	438817	A1023799	Hs.163242
	430630	AW269920	Hs.2621
30	428227	AA321649	Hs.2248
	424086	A1351010	Hs.102267
	425289	AW139342	Hs.155530
	438476	AA326108	Hs.53631
	415286	AW249540	Hs.72548
35	428157	A1738719	Hs.288668
	456804	A1421645	Hs.139851
	429490	A971131	Hs.293684
	429732	U20158	Hs.2488
	433757	A1949974	Hs.152670
40	400419	AF084545	Hs.81800
	428046	AW812795	Hs.155381
	411642	NM_014932	Hs.71132
	444381	BE387335	Hs.283713
	435767	H73505	Hs.117874
45	427581	NM_014788	Hs.179703
	448019	AW947164	Hs.195641
	406671	AA129547	Hs.285754
	447835	AW591623	Hs.164129
	448520	AB002367	Hs.21355
50	417308	H60720	Hs.81892
	432731	R31178	Hs.287820
	421566	NM_000399	Hs.1395
	419235	AW470411	Hs.288433
55	426490	NM_001621	Hs.170087
	421485	AA243499	Hs.104800
	422603	BE242587	Hs.118651
	418110	R43523	Hs.217754
	425984	AW836277	Hs.165638
	432606	NM_002104	Hs.3066
60	436772	AW975688	Hs.250867
	444989	A1203334	Hs.160828
	426890	AA393167	Hs.41294
	437330	AL353944	Hs.50115
	458809	AW972512	Hs.20985
65	446627	A1973016	Hs.15725
	452960	AK001335	Hs.31137
	417280	AW173116	Hs.262206
	422173	BE385828	Hs.250619
	420552	AK000492	Hs.98806
70	425188	AK002052	Hs.155071
	427871	AW992405	Hs.59622
	446152	A1292036	Hs.150028
	426560	AA381661	Hs.119878
	419034	NM_002110	Hs.89555
75	456508	AA502764	Hs.123469
	452281	T93500	Hs.28792
	442932	AA457211	Hs.8858
	426075	AW513691	Hs.270149
	434398	AA121098	Hs.3838
80	450506	NM_004460	Hs.418
	425782	U66468	Hs.159525
	426108	AA622037	Hs.166468
	416000	R82342	Hs.79856
	450236	AW162998	Hs.24684

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	449679	A1823951	Hs.296668	Homo sapiens cDNA FLJ11848 fs, clone HE	11.6
	441350	AB020690	Hs.7782	paraneoplastic antigen MA2	11.4
	442227	AW771958	Hs.175437	ESTs	11.4
5	414004	AA737033	Hs.7155	ESTs, Weakly similar to 2115357A TYG pr	11.4
	447056	N87879	Hs.157695	ESTs	11.3
	444863	AW384082	Hs.301323	ESTs	11.3
	452838	U65011	Hs.30743	preferentially expressed antigen in meta	11.2
	426780	BE242284	Hs.172189	adenylate cyclase 7	11.1
	453160	A1283307	Hs.146228	ESTs	11.1
10	449539	W80363	Hs.58446	ESTs	11.1
	415323	BE269352	Hs.949	neutrophil cytosolic factor 2 (65kD, chr	11.0
	423508	AW604297	Hs.129711	hepatitis A virus cellular receptor 1	11.0
	408380	AF123050	Hs.44532	diubiquitin	11.0
	448410	AK000227	Hs.21128	hypothetical protein FLJ20220	11.0
15	451277	AK001123	Hs.26176	hypothetical protein FLJ10261	10.8
	453165	S74727	Hs.32042	aspartoacylase (aminoacylase 2, Canavan	10.8
	435380	AA579001	Hs.192221	ESTs	10.7
	447183	AJ554733	Hs.173182	ESTs	10.7
	438330	AW450572	Hs.257316	ESTs	10.6
20	441392	AW451831	Hs.222119	ESTs, Weakly similar to K1CQ_HUMAN KERAT	10.5
	418036	Z37976	Hs.83337	latent transforming growth factor beta b	10.5
	452862	AW378065	Hs.8687	ESTs	10.4
	431512	BE270734	Hs.2795	lactate dehydrogenase A	10.3
25	421478	AJ683243	Hs.97258	ESTs	10.3
	413879	AA132961	Hs.212533	Homo sapiens cDNA: FLJ22572 fs, clone H	10.3
	411800	N39342	Hs.5184	TH1 drosophila homolog	10.3
	433862	D86960	Hs.3810	KIAA0205 gene product	10.3
	440594	AW445167	Hs.126038	ESTs	10.2
	414504	AW069181	Hs.293523	ESTs, Weakly similar to transformation-r	10.2
30	431211	M86849	Hs.5568	gap junction protein, beta 2, 26kD (conn	10.2
	437682	AA476652	Hs.94952	Homo sapiens cDNA: FLJ23371 fs, clone H	10.1
	430097	AJ523245	Hs.127638	ESTs	10.1
	432579	AF043244	Hs.278439	nucleolar protein 3 (apoptosis repressor	10.0
35	434927	H46812	Hs.293815	Homo sapiens HSPC285 mRNA, partial cds	9.9
	424113	AJ743880	Hs.12878	ESTs	9.9
	439981	AJ348408	Hs.124675	ESTs, Weakly similar to unnamed protein	9.9
	411937	AW876626		gb:RC3-PT0028-120200-013-d08 PT0028 Homo	9.9
	439653	AW021103	Hs.6631	hypothetical protein FLJ20373	9.9
40	428862	NM_000346	Hs.2316	SRY (sex-determining region Y)-box 9 (ca	9.8
	424623	AW963062	Hs.165809	ESTs	9.8
	410762	AF226053	Hs.66170	HSKM-B protein	9.8
	433285	AW975944	Hs.237396	ESTs	9.7
	413795	AL040178	Hs.142003	ESTs	9.6
45	434392	AW983709	Hs.268051	ESTs	9.6
	435542	AA687376	Hs.269533	ESTs	9.6
	430887	N66801	Hs.260287	ESTs, Weakly similar to ALU7_HUMAN ALU S	9.5
	410339	AJ916499	Hs.298258	ESTs	9.5
	452431	U88879	Hs.29499	tol-like receptor 3	9.5
50	405121	AB028989	Hs.88500	mitogen-activated protein kinase 8 intr	9.5
	408134	AK000184	Hs.42945	acid sphingomyelinase-like phosphodiester	9.4
	438966	AW979074		gb:EST391184 MAGE resequences, MAGP Homo	9.4
	449625	NM_014253	Hs.23796	odx (odd Oz/ten-m, Drosophila) homolog 1	9.4
	441024	AW081530	Hs.137088	ESTs	9.3
55	445800	AF070526	Hs.13429	Homo sapiens clone 24787 mRNA sequence	9.2
	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	9.2
	440074	AA863045	Hs.199057	ESTs, Weakly similar to T00050 hypothesi	9.2
	421659	NM_014459	Hs.106511	protocadherin 17	9.2
	434542	AA769310	Hs.61260	hypothetical protein FLJ13164	9.1
60	427283	AL119796	Hs.174185	ectonucleotide pyrophosphatase/phosphodi	9.1
	426820	AA436187	Hs.172631	integrin, alpha M (complement) component	9.1
	419441	AW023731	Hs.274368	Homo sapiens mRNA; cDNA DKFZp58611524 (I	9.0
	407856	AA045281	Hs.268175	phosphoprotein associated with GEMs	9.0
	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fs, clone CO	9.0
65	446460	AW013999	Hs.150164	ESTs	8.9
	452598	AJ831594	Hs.68647	ESTs, Weakly similar to ALU7_HUMAN ALU S	8.9
	407975	X89426	Hs.41716	endothelial cell-specific molecule 1 (NO	8.9
	437259	AJ377755	Hs.120695	ESTs	8.7
	420235	AA256756	Hs.31178	ESTs	8.7
70	436959	AL133076	Hs.5354	hypothetical protein FLJ12716	8.7
	413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	8.6
	435894	AJ076667	Hs.188011	ESTs	8.6
	418693	AJ750878	Hs.87409	thrombospondin 1	8.6
	425770	NM_014363	Hs.159492	spastic ataxia of Charlevoix-Saguenay (s	8.6
75	456249	AJ206144	Hs.82508	HRHFB2206 protein	8.6
	437672	AW748265	Hs.5741	flavohemoglobin b5-b5R	8.6
	430268	AK000737	Hs.237480	hypothetical protein FLJ20730	8.5
	417225	AA815048	Hs.24078	Homo sapiens cDNA FLJ12649 fs, clone NT	8.5
	435266	AK001842	Hs.4863	Homo sapiens cDNA FLJ11080 fs, clone PL	8.4
80	447974	R76886		gb:Y164b03.a1 Soares placenta Nb2HP Homo	8.4
	447850	AB018298	Hs.19822	SEC24 (S. cerevisiae) related gene famil	8.4
	429525	N92540	Hs.205353	ectonucleoside triphosphate diphosphohyd	8.3
	435717	AF227905	Hs.105794	UDP-glucose:glycoprotein glucosyltransfe	8.3
	445784	AJ253155	Hs.146065	ESTs	8.3

	454024	AA993527	Hs.16281	hypothetical protein FLJ23403	8.3
	443885	H91806	Hs.15284	ESTs	8.3
	403713				8.3
5	433376	AI249361	Hs.74122	caspase 4, apoptosis-related cysteine pr	8.2
	419490	NM_006144	Hs.90708	granzyme A (granzyme 1, cytotoxic T-lymp	8.2
	444670	HS8373	Hs.37494	ESTs	8.2
	408761	AA057264	Hs.238936	ESTs	8.2
	453033	AA325869	Hs.31463	KIAA0281 gene product	8.2
10	441224	AU076964	Hs.7753	calumenin	8.1
	441689	AI123705	Hs.106932	ESTs	8.1
	440283	AF732892	Hs.190489	ESTs	8.1
	429598	AA811257	Hs.269710	ESTs	8.1
	424775	AB014540	Hs.153026	SWAP-70 protein	8.1
15	451292	AB037716	Hs.26204	KIAA1295 protein	8.0
	453951	AI676235	Hs.24789	ESTs	8.0
	416200	AI188972	Hs.44257	Homo sapiens mRNA; cDNA DKFZp762O2215 (I	8.0
	431087	H12723	Hs.290791	ESTs	8.0
	432328	AI572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	7.9
20	419474	AW968619	Hs.155849	ESTs	7.9
	418342	BE002723	Hs.293504	ESTs, Moderately similar to ALU1_HUMAN A	7.9
	408088	AW157022	Hs.4947	Homo sapiens cDNA: FLJ22584 fs, clone H	7.9
	413719	BE439680	Hs.75498	small inducible cytokine subfamily A (Cy	7.9
	440987	AA911705	Hs.130229	ESTs	7.9
25	412448	L12964	Hs.73895	tumor necrosis factor receptor superfam	7.9
	415737	AA167626	Hs.118743	ESTs	7.9
	412959	D87458	Hs.75090	KIAA0282 protein	7.8
	424247	X14008	Hs.234734	lysosome (renal amyloidosis)	7.8
	453331	AI240665	Hs.8895	ESTs	7.8
30	421991	NM_014918	Hs.110488	KIAA0990 protein	7.8
	443450	N86045	Hs.133529	ESTs	7.8
	431876	AA521183	Hs.269678	ESTs	7.8
	432582	AI623817	Hs.168457	ESTs	7.7
	445800	AA126419	Hs.301632	ESTs	7.7
35	424636	AA453734	Hs.10198	ESTs	7.7
	432134	AI816782	Hs.122583	Homo sapiens cDNA: FLJ21934 fs, clone H	7.7
	446873	AI554439	Hs.30724	ESTs	7.7
	400793	AA635062	Hs.50094	Homo sapiens mRNA; cDNA DKFZp434O0515 (I	7.7
	436061	AI248584	Hs.190745	Homo sapiens cDNA: FLJ21326 fs, clone C	7.7
40	442028	AI239437	Hs.48945	ESTs	7.7
	442760	BE075297	Hs.10067	ESTs, Weakly similar to KIAA1205 protein	7.7
	442152	R39246	Hs.239666	Homo sapiens cDNA FLJ13495 fs, clone PL	7.7
	427944	AA417878	Hs.48401	ESTs, Weakly similar to ALU8_HUMAN ALU S	7.6
	414646	AA353776	Hs.901	CD48 antigen (B-cell membrane protein)	7.6
45	407634	AW016569	Hs.301280	ESTs, Highly similar to AF241831 1 intra	7.6
	418372	AA311833	Hs.84318	replication protein A1 (70kD)	7.6
	434666	AF151103	Hs.112259	T cell receptor gamma locus	7.6
	442432	BE093589	Hs.38178	Homo sapiens cDNA: FLJ23468 fs, clone H	7.6
	408418	AW963897	Hs.44743	KIAA1435 protein	7.6
50	418805	AI829520	Hs.227513	ESTs	7.5
	425354	U62027	Hs.155935	complement component 3a receptor 1	7.5
	408743	AL110246	Hs.47367	hypothetical protein from EUROIMAGE 7836	7.5
	444836	AI589825	Hs.173504	ESTs, Weakly similar to JC5238 galactosy	7.5
	421810	AK001718	Hs.108530	hypothetical protein FLJ10856	7.4
55	432753	NM_014075	Hs.278915	PRO0593 protein	7.4
	420061	AW024937	Hs.29410	ESTs	7.4
	432865	AI753709	Hs.152484	ESTs	7.4
	419070	AW979068	Hs.182503	ESTs	7.4
	430172	AA468591	Hs.161889	ESTs	7.4
60	446343	AW771414	Hs.8314	ESTs	7.4
	424125	M31669	Hs.1735	Inhibin, beta B (activin AB beta polypep	7.4
	453818	BE256832	Hs.10711	Homo sapiens cDNA FLJ13449 fs, clone PL	7.4
	447046	AA326187	Hs.17170	G protein-coupled receptor 4	7.4
	410577	X91911	Hs.64639	glioma pathogenesis-related protein	7.4
65	452240	AI591147	Hs.61232	ESTs	7.3
	450375	AA009647	Hs.8850	a disintegrin and metalloproteinase doma	7.3
	422631	BE218919	Hs.118793	hypothetical protein FLJ10688	7.3
	450205	AI219748	Hs.11356	ESTs	7.3
	437212	AI765021	Hs.210775	ESTs	7.3
70	440193	AW902312	Hs.7037	patld (mouse) homolog, patldn	7.2
	417022	NM_014737	Hs.80905	Ras association (RalGDS/AF-6) domain fam	7.2
	451818	AI819018		gb:ts54f01.x1 NCI_CGAP_Kd8 Homo sapiens	7.2
	453013	AA031407		gb:zk15g12.r1 Soares_pregnant_uterus_NbH	7.2
	430105	X70297	Hs.2540	cholinergic receptor, nicotinic, alpha p	7.2
75	451621	AI879148	Hs.26770	fatty acid binding protein 7, brain	7.2
	442438	AA995998		gb:os26b03.s1 NCI_CGAP_Kd5 Homo sapiens	7.2
	415138	C18356	Hs.78045	tissue factor pathway inhibitor 2	7.2
	407305	AA715284		gb:nv35f03.x1 NCI_CGAP_Br5 Homo sapiens	7.2
	452814	AI092790	Hs.55016	hypothetical protein FLJ21835	7.2
80	426028	NM_001110	Hs.172028	a disintegrin and metalloproteinase doma	7.2
	443462	AI064690	Hs.171176	ESTs	7.2
	422060	R20893	Hs.75613	CD36 antigen (collagen type I receptor,	7.2
	434096	AW662958	Hs.75825	pleiomorphic adenoma gene-like 1	7.1
	443161	A038318		gb:ox48c08.x1 Soares_total_fetus_Nb2HF8_	7.1

5	458725	AW970192	Hs.171942	ras responsive element binding protein 1	7.1
	426423	NM_012446	Hs.169833	single-stranded-DNA-binding protein	7.1
	412783	BE276738	Hs.74578	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	7.1
	435664	AI032087	Hs.269819	ESTs	7.0
	431708	AI698136	Hs.108873	ESTs	7.0
	426501	AW043782	Hs.293616	ESTs	7.0
	453548	AL079983	Hs.75442	albumin	7.0
	426595	AW971980	Hs.62402	p21/Cdc42/Rac1-activated kinase 1 (yeast	7.0
10	412490	AW803564	Hs.288850	Homo sapiens cDNA: FLJ22528 fs, clone H	7.0
	431556	AF016028	Hs.260039	sarcospan (Kras oncogene-associated gene	6.9
	420018	U56387	Hs.94376	proprotein convertase subtilisin/kexin 1	6.9
	418986	AI123555	Hs.81795	ESTs	6.9
	430290	AI734110	Hs.136355	ESTs	6.9
	427472	AA522539	Hs.131250	transposon-derived Buster3 transposase-I	6.9
15	444042	NM_004915	Hs.10237	ATP-binding cassette, sub-family G (WHIT	6.9
	414737	AI160386	Hs.125087	ESTs	6.9
	420479	AW183695	Hs.186572	ESTs	6.9
	432656	NM_000246	Hs.3076	MHC class II transactivator	6.9
20	414217	AI309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	6.9
	431870	AW449902	Hs.105500	ESTs	6.9
	415788	AW628586	Hs.78851	KIAA0217 protein	6.9
	430066	AI929659	Hs.237825	signal recognition particle 72kD	6.9
	437156	AI916600	Hs.121194	Homo sapiens cDNA: FLJ21569 fs, clone C	6.8
25	401539				6.8
	412782	AI189211	Hs.173044	ESTs	6.8
	416058	L08895	Hs.78995	MADS box transcription enhancer factor 2	6.8
	437205	AL110232		gb:Homo sapiens mRNA; cDNA DKFZp564D2071	6.7
	458814	AI498967	Hs.170861	ESTs	6.7
30	452106	AI141031	Hs.21342	ESTs	6.7
	413249	AF167160	Hs.75251	DEAD/H (Asp-Glu-Ala-Asp/His) box binding	6.7
	420910	AL049437	Hs.100292	Homo sapiens mRNA; cDNA DKFZp586E1120 (I	6.7
	445527	W39694	Hs.83286	ESTs	6.7
	424063	NM_002019	Hs.138671	frs-related tyrosine kinase 1 (vascular	6.7
35	421977	W94197	Hs.110165	ribosomal protein L26 homolog	6.7
	430280	AA361258	Hs.237868	interleukin 7 receptor	6.7
	415989	AI267700	Hs.111128	ESTs	6.7
	418026	BE379727	Hs.83213	fatty acid binding protein 4, adipocyte	6.6
	425295	AA431366	Hs.37251	ESTs	6.6
40	438619	AB032773	Hs.6341	TU1281-TY protein	6.6
	424916	AW887440	Hs.23096	ESTs	6.6
	429697	AW296451	Hs.24605	ESTs	6.6
	408741	M73720	Hs.646	carboxypeptidase A3 (mast cell)	6.6
	403549				6.6
45	449008	AW578003	Hs.22826	tropomodulin 3 (ubiquitous)	6.6
	435798	BE395289	Hs.12720	eIF4E-transporter	6.6
	447217	BE465754	Hs.17778	neuropilin 2	6.6
	453070	AK001465	Hs.31575	SEC63, endoplasmic reticulum translocon	6.6
	410276	AI554545	Hs.68301	ESTs	6.6
50	435391	AA704588	Hs.58934	ESTs	6.6
	421878	AA299652	Hs.111496	Homo sapiens cDNA FLJ11643 fs, clone HE	6.6
	452092	BE245374	Hs.27842	hypothetical protein FLJ11210	6.5
	448789	BE539108	Hs.22051	Homo sapiens mRNA; cDNA DKFZp434O119 (fr	6.5
	425331	AW962128		gb:EST374201 MAGE resequences, MAGG Homo	6.5
55	431956	AK002032	Hs.272245	Homo sapiens cDNA FLJ11170 fs, clone PL	6.5
	444880	AW118683	Hs.154150	ESTs	6.5
	434131	AI858275	Hs.143659	ESTs	6.5
	446658	AA440137	Hs.164989	ESTs	6.5
	408150	BE620274	Hs.43112	Homo sapiens mRNA; cDNA DKFZp434B1620 (I	6.5
	403790				6.5
60	417129	AI381800	Hs.143275	Homo sapiens cDNA FLJ13233 fs, clone OV	6.5
	452119	AI656378	Hs.33461	ESTs	6.4
	437396	BE140396	Hs.21621	hypothetical protein DKFZp762O076	6.4
	458946	AA009716	Hs.42311	ESTs	6.4
65	452110	T47667	Hs.28005	Homo sapiens mRNA; cDNA DKFZp564G2463 (I	6.4
	449318	AW236021	Hs.108788	ESTs, Weakly similar to zeste [D.melanog	6.4
	408308	AL033377	Hs.44197	hypothetical protein DKFZp564D0462	6.4
	402474				6.4
	430712	AW044647	Hs.196284	ESTs	6.4
70	418299	AA279530	Hs.83968	integrin, beta 2 (antigen CD18 (p95), ly	6.4
	432683	AW995441	Hs.10475	ESTs	6.4
	423764	AF054589	Hs.132739	ESTs	6.4
	409571	AA504249	Hs.187585	ESTs	6.4
	401600	BE247275	Hs.151787	U5 snRNP-specific protein, 116 kD	6.4
75	415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	6.4
	432925	AA878324	Hs.192734	ESTs	6.4
	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S.	6.4
	435894	AW937825	Hs.56847	Homo sapiens cDNA FLJ12874 fs, clone NT	6.4
	430335	D80007	Hs.239499	KIAA0185 protein	6.3
80	453370	AI470523	Hs.182356	ESTs, Moderately similar to translation	6.3
	421327	AA837295	Hs.188802	ESTs	6.3
	450654	AJ245587	Hs.25275	Kruppel-type zinc finger protein	6.3
	413497	BE177661		gb:RC1-HT0599-020300-011-h02 HT0598 Homo	6.3
	445279	R41900	Hs.22245	ESTs	6.3

	429747	M87507	Hs.2490	caspase 1, apoptosis-related cysteine pr	6.3
	421252	AA765930	Hs.130878	ESTs	6.3
	432140	AK000404	Hs.272688	hypothetical protein FLJ20397	6.3
5	434203	BE262677	Hs.283558	hypothetical protein PRO1855	6.2
	419436	AA991639	Hs.15036	ESTs, Highly similar to AF161358 1 HSPC0	6.2
	430287	AW182459	Hs.125759	ESTs, Weakly similar to tumor suppressor	6.2
	409690	W45393	Hs.94642	ESTs, Highly similar to ATF4 [H.sapiens]	6.2
	420101	AW500529	Hs.95180	Homo sapiens mRNA: cDNA DKFZp434A205 (fr	6.1
10	435689	AF249107	Hs.269901	ESTs	6.1
	417259	AW903838	Hs.81800	chondroitin sulfate proteoglycan 2 (vers	6.1
	448030	N30714	Hs.20161	HDCME31P protein	6.1
	442571	C06338	Hs.165464	ESTs	6.1
	421202	AF193339	Hs.102506	eukaryotic translation initiation factor	6.1
15	415558	AA885143	Hs.125719	ESTs	6.1
	408042	AL049233	Hs.42244	Homo sapiens mRNA: cDNA DKFZp564A023 (fr	6.1
	438086	AA336519	Hs.301167	Homo sapiens cDNA: FLJ21545 fs, clone C	6.1
	427390	AI432163	Hs.268231	Homo sapiens cDNA: FLJ23111 fs, clone L	6.0
	440749	W22335	Hs.7392	Homo sapiens mRNA: cDNA DKFZp761E0323 (f	6.0
20	448822	BE149845	Hs.289038	Homo sapiens cDNA: FLJ20994 fs, clone C	6.0
	424806	AA382523	Hs.105689	ESTs	6.0
	435185	AA669490	Hs.289109	dimethylarginine dimethylaminohydrolase	6.0
	452235	AL039743	Hs.28514	Homo sapiens mRNA: cDNA DKFZp434H092 (fr	6.0
	432415	T15971	Hs.289014	ESTs	6.0
25	436345	AA873008	Hs.121572	ESTs	6.0
	439451	AF086270	Hs.278554	heterochromatin-like protein 1	6.0
	434674	AA831879	Hs.136985	ESTs	6.0
	429653	NM_005955	Hs.211581	metal-regulatory transcription factor 1	6.0
	446822	AB037794	Hs.16229	KIAA1373 protein	6.0
30	423590	AW952412	Hs.65874	ESTs	6.0
	424026	AI798295	Hs.123218	ESTs	5.9
	423246	AL119114	Hs.23107	ESTs	5.9
	420982	AW576160	Hs.100729	KIAA0692 protein	5.9
35	435008	AF150262	Hs.162898	ESTs	5.9
	420092	AA814043	Hs.88045	ESTs	5.9
	444484	AK002126	Hs.11260	hypothetical protein FLJ11264	5.9
	410193	AJ132592	Hs.59757	zinc finger protein 281	5.9
	450534	AI570189	Hs.25132	KIAA0470 gene product	5.9
	440146	AW014231	Hs.90790	Homo sapiens cDNA: FLJ22930 fs, clone K	5.9
40	425361	AA355933	Hs.132221	Homo sapiens cDNA FLJ12401 fs, clone MA	5.9
	425174	Q67450	Hs.154978	KIAA0261 protein	5.9
	458287	AA987556	Hs.12867	ESTs	5.9
	433793	AW975959	Hs.107513	ESTs, Moderately similar to KIAA1058 pro	5.8
	443228	W24781	Hs.293798	ESTs	5.8
45	419983	W56956	Hs.94030	Homo sapiens mRNA: cDNA DKFZp586E1624 (f	5.8
	410361	BE391804	Hs.82681	guanylate binding protein 1, interferon-	5.8
	415714	NM_002290	Hs.78672	laminin, alpha 4	5.8
	421689	N87820	Hs.106826	hypothetical protein	5.8
	431176	AI026984	Hs.293662	ESTs	5.8
50	443837	AI984625	Hs.9884	spindle pole body protein	5.8
	410623	AW958932	Hs.293833	ESTs	5.8
	421298	AW172431	Hs.13012	ESTs	5.8
	449052	AW029507	Hs.161102	ESTs	5.8
	433043	W57554	Hs.125019	ESTs, Highly similar to KIAA0886 protein	5.8
55	439444	AI277652	Hs.54578	ESTs	5.7
	428698	AA852773	Hs.297939	ESTs, Weakly similar to T17344 hypotheti	5.7
	411928	AA888624	Hs.19121	adaptor-related protein complex 2, alpha	5.7
	442242	AV647908	Hs.90424	Homo sapiens cDNA: FLJ23285 fs, clone H	5.7
	417315	AI080042	Hs.180450	ribosomal protein S24	5.7
60	422544	AB018259	Hs.118140	KIAA0716 gene product	5.7
	412584	X54870	Hs.74085	DNA segment on chromosome 12 (unique) 24	5.7
	433505	AW504027	Hs.15301	Homo sapiens NY-REN-25 antigen mRNA, par	5.7
	410425	BE278367	Hs.63510	KIAA0141 gene product	5.7
	457292	AI921270	Hs.214178	Homo sapiens cDNA FLJ14251 fs, clone OV	5.7
65	457100	AA417878	Hs.48401	ESTs, Weakly similar to ALU8_HUMAN ALU S	5.7
	436895	AI160015	Hs.118112	ESTs	5.7
	426283	NM_003937	Hs.169139	kynureninase (L-kynurenine hydrolase)	5.7
	441518	AW161697	Hs.294150	ESTs	5.7
	448807	AI571940	Hs.7549	ESTs	5.7
70	449656	AA002008	Hs.188633	ESTs	5.7
	439211	AI890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fs, clone K	5.7
	430440	X52599	Hs.2561	nerve growth factor, beta polypeptide	5.7
	413551	BE242639	Hs.75426	ubiquitin associated protein	5.7
	441633	AW958544	Hs.112242	ESTs	5.7
75	427093	AA398118	Hs.97579	ESTs	5.6
	418250	U29926	Hs.83918	adenosine monophosphate deaminase (isofo	5.6
	432267	AK000872	Hs.274227	Homo sapiens cDNA FLJ10010 fs, clone HE	5.6
	419839	U24577	Hs.93304	phosphatase A2, group VII (platelet-ac	5.6
	430253	AK001514	Hs.236844	hypothetical protein FLJ10652	5.6
	450447	AF212223	Hs.25010	hypothetical protein P15-2	5.6
80	434823	AB023163	Hs.4014	KIAA0946 protein; Huntingtin interacting	5.6
	420642	AK001520	Hs.99545	Homo sapiens cDNA FLJ10658 fs, clone NT	5.6
	414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	5.6
	420825	AK656727		gb:153112.x1 NC1_CGAP_GC6 Homo sapiens	5.6

	422383	T55979	Hs.115474	replication factor C (activator 1) 3 (38	5.6
	452046	AB018345	Hs.27657	KIAA0802 protein	5.6
	408911	AW294772	Hs.58321	Homo sapiens cDNA FLJ14103 fs, clone MA	5.6
5	414844	AA296874	Hs.77494	deoxyguanosine kinase	5.6
	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	5.6
	430512	AF182294	Hs.241578	U6 snRNA-associated Sm-like protein LSM8	5.6
	430339	W28608	Hs.239625	integral membrane protein 28	5.6
	420153	N22120	Hs.75277	hypothetical protein FLJ13910	5.6
10	420892	AW975076	Hs.172589	nuclear phosphoprotein similar to S. cer	5.6
	441568	AI733322	Hs.127176	ESTs	5.5
	414575	H11257	Hs.296233	ESTs	5.5
	419929	U90268	Hs.53810	cerebral cavernous malformations 1	5.5
	438613	CD5569	Hs.243122	hypothetical protein FLJ13057 similar to	5.5
15	453064	R40334	Hs.301395	Homo sapiens cDNA: FLJ21204 fs, clone C	5.5
	433409	AI278802	Hs.25661	ESTs	5.5
	407094	AF000574	Hs.22405	leukocyte immunoglobulin-like receptor,	5.5
	425234	AW152225	Hs.165909	ESTs	5.5
	447644	AW861622	Hs.108646	Homo sapiens cDNA FLJ12534 fs, clone NT	5.5
20	411653	AF070578	Hs.71168	Homo sapiens clone 24674 mRNA sequence	5.5
	446534	AI307356	Hs.175225	ESTs	5.5
	452355	N54926	Hs.29202	G protein-coupled receptor 34	5.5
	434715	BE005346	Hs.116410	ESTs	5.5
	440486	BE243513	Hs.7212	hypothetical protein PP1044	5.5
	444825	AW167613	Hs.248	mitogen-activated protein kinase kinase	5.5
25	419172	AW338625	Hs.22120	ESTs	5.4
	444931	AV652066	Hs.75113	general transcription factor IIIA	5.4
	413940	AI833205	Hs.159914	ESTs	5.4
	410480	R97457	Hs.63984	cadherin 13, H-cadherin (heart)	5.4
30	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	5.4
	434361	AF129755	Hs.117772	ESTs	5.4
	453392	U23752	Hs.32964	SRY (sex determining region Y)-box 11	5.4
	445175	AV652851	Hs.300848	ESTs	5.4
	411213	AA676939	Hs.69285	neuropilin 1	5.4
35	412530	AA766268	Hs.266273	Homo sapiens cDNA FLJ13346 fs, clone OV	5.4
	422667	H25642	Hs.133471	ESTs	5.4
	434064	AL049045	Hs.180758	hypothetical protein PRO0082	5.4
	429688	BE245169	Hs.211610	CUG triplet repeat, RNA-binding protein	5.4
	452060	W26980	Hs.153612	ATP-binding cassette, sub-family F (GCN2	5.4
40	419093	AI804054	Hs.112685	ESTs	5.4
	436267	AW450938	Hs.180115	ESTs	5.4
	405257				5.4
	431154	AW971228	Hs.290259	ESTs	5.4
	415511	AI732617	Hs.182362	ESTs	5.4
45	419175	AW270037	Hs.179507	KIAA0779 protein	5.3
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	5.3
	423720	AL044191	Hs.23388	Homo sapiens cDNA: FLJ21310 fs, clone C	5.3
	409995	AW960597	Hs.30184	ESTs	5.3
	414911	NM_000107	Hs.77602	damago-specific DNA binding protein 2 (4	5.3
50	455718	BE070263	gb:QV4-BT0407-280100-090-e07 BT0407 Homo		5.3
	430598	AK001764	Hs.247112	hypothetical protein FLJ10902	5.3
	419885	H66373	Hs.15973	ESTs, Highly similar to bA393J16.3 [Hsa	5.3
	428753	AW939252	Hs.192927	hypothetical protein FLJ20251	5.3
	423099	NM_002837	Hs.123641	protein tyrosine phosphatase, receptor 1	5.3
55	404176				5.3
	431475	AI567669	Hs.287316	ESTs	5.3
	406625	Y13647	Hs.119597	stearoyl-CoA desaturase (delta-9-desatur	5.3
	405475				5.3
	430180	AA331406	Hs.75456	A kinase (PRKA) anchor protein 10	5.3
60	446183	AA354991	Hs.14222	Homo sapiens mRNA: cDNA DKFZp761P019 (fr	5.3
	417381	AF164142	Hs.82042	solute carrier family 23 (nucleobase tra	5.3
	433029	NM_014322	Hs.279926	opsin 3 (encephalopsin)	5.3
	442837	AI022082	Hs.50492	ESTs	5.3
	437140	AA312799	Hs.283689	activator of CREM in testis	5.3
65	408989	AW361666	Hs.49500	KIAA0746 protein	5.3
	417355	D13168	Hs.82002	endothelin receptor type B	5.3
	407361	AA744622	Hs.292645	ESTs, Weakly similar to ALU5_HUMAN ALU S	5.3
	437734	AA693951	Hs.180284	ESTs	5.3
	452234	AW084176	Hs.223296	ESTs	5.3
70	423057	AW961597	Hs.130816	ESTs	5.3
	439593	BE073597	Hs.124863	ESTs	5.3
	446501	AI302616	Hs.150619	ESTs	5.3
	416408	D86961	Hs.79299	lipoma HMGIC fusion partner-like 2	5.2
	427164	AB037721	Hs.173871	KIAA1300 protein	5.2
75	416815	U41514	Hs.80120	UDP-N-acetyl-alpha-D-galactosamine:polyp	5.2
	448212	AI475858	gb:tc87d07.x1 NC1_CGAP_CLL1 Homo sapiens		5.2
	412420	AL035668	Hs.73853	bone morphogenetic protein 2	5.2
	416975	NM_004131	Hs.1051	granzyme B (granzyme 2, cytotoxic T-lymp	5.2
	406815	AA833930	Hs.288036	tRNA isopentenylpyrophosphate transferas	5.2
80	451418	BE387790	Hs.26369	hypothetical protein FLJ20287	5.2
	425322	U63630	Hs.155637	protein kinase, DNA-activated, catalytic	5.2
	451156	AI983569	Hs.232042	ESTs	5.2
	415910	U20350	Hs.78913	chemokine (C-X3-C) receptor 1	5.2
	423024	AA593731	Hs.75613	CD36 antigen (collagen type I receptor,	5.2

5	428593	AW207440	Hs.185973	degenerative spermatocyte (homolog Dros	5.2
	451149	AL047586	Hs.10283	ESTs	5.2
	429458	BE161832	Hs.292689	ESTs	5.2
	422241	Y00062	Hs.170121	protein tyrosine phosphatase, receptor I	5.2
	432383	AK000144	Hs.274449	Homo sapiens cDNA FLJ20137 fs, clone CO	5.2
	417696	BE241624	Hs.82401	CD69 antigen (p60, early T-cell activati	5.2
	442991	BE281238	Hs.8886	hypothetical protein FLJ20424	5.2
	426711	AA383471	Hs.180669	conserved gene amplified in osteosarcoma	5.2
10	438995	AI277886	Hs.164875	ESTs	5.1
	438582	AI521310	Hs.283365	ESTs, Weakly similar to ALU5, HUMAN ALU S	5.1
	424859	U92014	Hs.153527	Homo sapiens pTMS mariner-like transpos	5.1
	445563	AW873606	Hs.149006	ESTs	5.1
	416852	AF283776	Hs.80285	Homo sapiens mRNA; cDNA DKFZp586C1723 (I	5.1
15	420567	AK000812	Hs.98874	similar to proline-rich protein 48	5.1
	420630	AL133101	Hs.99508	Homo sapiens mRNA; cDNA DKFZp434C0921 (I	5.1
	455510	AA422029	Hs.143640	ESTs, Weakly similar to hyperpolarizatio	5.1
	412676	NM_000165	Hs.74471	gap junction protein, alpha 1, 43kD (con	5.1
	438146	Z36842	Hs.57548	ESTs	5.1
20	423430	AF112481	Hs.128501	RAD54, S. cerevisiae, homolog of, B	5.1
	421633	AF121860	Hs.106260	sorting nexin 10	5.1
	447197	R36075		gb:yh88b01.s1 Soares placenta Nb2HP Homo	5.1
	436943	AA773838	Hs.5353	caspase 10, apoptosis-related cysteine p	5.1
	456210	N49729	Hs.156875	ESTs	5.1
25	411893	R82845	Hs.273789	ESTs	5.1
	432331	W37862	Hs.274368	Homo sapiens mRNA; cDNA DKFZp586I1524 (I	5.1
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	5.1
	426822	W78950	Hs.220823	ESTs	5.1
	444269	AI590348	Hs.146220	ESTs	5.1
30	437204	AL110216	Hs.12285	ESTs	5.1
	443180	R15875	Hs.70945	ESTs	5.1
	431510	AA580082	Hs.112264	ESTs	5.0
	446312	BE087853		gb:QV1-BT0681-290400-181-h05 BT0681 Homo	5.0
	449870	AI672487	Hs.15423	hypothetical protein HDCMC04P	5.0
35	430462	AI584156	Hs.105640	ESTs	5.0
	457452	AW972675		gb:EST384766 MAGE resequences, MAGL Homo	5.0
	420397	NM_007018	Hs.97437	centrosomal protein 1	5.0
	408750	BE294069	Hs.93581	hypothetical protein FLJ10512	5.0
	426874	N67325	Hs.247132	ESTs	5.0
40	419746	AW867943	Hs.127216	Homo sapiens cDNA FLJ13465 fs, clone PL	5.0
	434237	AF119908	Hs.235516	hypothetical protein PRO2955	5.0
	410274	AA381807	Hs.61762	hypoxia-inducible protein 2	5.0

TABLE 35B:

45	Pkey:	Unique Eos probeset identifier number
	CAT number:	Gene cluster number
	Accession:	Genbank accession numbers

50	Pkey	CAT number	Accession
	411937	1266219_1	AW876626 AW876622 AW876624
	413497	1373771_1	BE177661 H06215 BE144709 BE144829
	420825	196769_1	AI556727 AI697887 AI802122 AA910877 Z28718 T16711 AA551731 AL047264 BE000621 R68736 AW992695 AI768764 AW271284 AW974653
			AI308951 AW055146 R93609 AW467031 AI096866 AI371871 AI126182 AI564756 AI381460 AI358914 AI419231 AW439733 R87059 AA628064
			AW088970 AW008695 R68682 AI719136 R97752 AW196262
55	425331	250199_1	AW962128 AA355353 AA427363
	437205	43463_1	AL110232 N94765
	438966	467438_1	AW979074 AA834841 AA828650
	442438	542469_1	AA995998 AI916584 R61781 T77332 F07756 F08149 F07647
	443161	561305_1	AI038316 AI344631 AI261653
60	448312	671114_1	BE087853 AI286184
	447197	711623_1	R36075 AI366546 R36187
	447974	745643_1	R76886 AI453674 R77049
	448212	755099_1	AI475858 AW969013
	451818	887271_1	AI819018 R05492 W27615
65	453013	94390_1	AA031407 N85751 AW974119 AA031408 AA572965
	455716	1352695_1	BE070263 BE070195 BE070265 BE070202 BE070233 BE070399 BE070203
	457452	339381_1	AW972675 AA541368 AA523039
	407305	312657	AA715284

TABLE 35C:

70	Pkey:	Unique number corresponding to an Eos probeset
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
	Strand:	Indicates DNA strand from which exons were predicted.
75	NI_position:	Indicates nucleotide positions of predicted exons.

80	Pkey	Ref	Strand	NI_position
	401539	8072433	Minus	62028-62608
	402474	7547175	Minus	53526-53628,55755-55920,57530-57757
	403549	8081591	Minus	137150-137362
	403713	6573831	Minus	152769-153155
	403790	8084957	Minus	87826-87947,89835-90002
	404176	9931122	Plus	52685-52800
	405257	7329310	Plus	73121-73273



405475 1931025 Plus 1548-1702

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TABLE 38A: ABOUT 169 GENES UP-REGULATED IN KIDNEY CANCER

Table 38A lists about 169 genes up-regulated in kidney cancer compared to normal kidney that are likely to be extracellular or cell-surface proteins. These were selected as for Table 35A and the predicted protein contained a structural domain that is indicative of surface or extracellular localization (e.g. Ig, fn3, epl, 7tm domains). Predicted protein domains are noted.

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Key: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 PSDomain: Protein Structural Domain  
 R1: Ratio of tumor to normal tissue

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Key	ExAccn	UnigeneID	Unigene Title	PSDomain	R1
424704	AI263293	Hs.152096	cytochrome P450	SS,p450	40.9
426559	AB001914	Hs.170414	paired basic am	TM,Peptidase_S8,P	35.6
458079	AI796870	Hs.54277	ESTs	TM	34.6
446921	AB012113	Hs.16530	small inducible	SS,IL8	25.9
452401	NM_007115	Hs.29352	tumor necrosis	TM,SS,Xink,CUB	24.8
414821	M63835	Hs.77424	Fc fragment of	TM,SS,Ig	23.4
414812	X72755	Hs.77367	monokine induce	SS,IL8	22.1
426471	M22440	Hs.170009	transforming gr	TM,SS,EGF	21.3
449523	NM_000579	Hs.54443	chemokine (C-C	TM,7tm_1	20.7
428227	AA321649	Hs.2248	small inducible	IL8	19.5
456804	AA21645	Hs.139851	caveolin 2	TM,Caveolin	17.8
411842	NM_014932	Hs.71132	neurofilin 1	TM,SS,COesterase	16.2
427581	NM_014788	Hs.179703	KIAA0129 gene p	TM	15.6
448520	AB002367	Hs.21355	doublecortin an	TM,kinase	14.8
417308	H60720	Hs.81892	KIAA0101 gene p	TM	14.8
421566	NM_000399	Hs.1395	early growth re	TM,zf-C2H2	14.6
422603	BE242587	Hs.118651	hematopoietical	TM,SS,homeobox	14.4
425994	AW838277	Hs.165636	hypothetical pr	TM	14.2
432606	NM_002104	Hs.3068	granzyme K (ser	TM,SS,trypsin	14.1
458809	AW972512	Hs.20585	sin3-associated	SS	13.7
446627	AI973016	Hs.15725	hypothetical pr	TM	13.6
452960	AK001335	Hs.31137	Homo sapiens cD	TM,Y_phosphatase	13.3
420552	AK000492	Hs.98806	hypothetical pr	TM,SS	13.0
425188	AK002052	Hs.155071	hypothetical pr	TM	12.6
419034	NM_002110	Hs.89555	hemopoietic cel	TM,kinase,SH2,SH3	12.3
449332	AA457211	Hs.8858	bromodomain adj	TM,bromodomain,PHD	12.3
434398	AA121098	Hs.3838	serum-inducible	TM,kinase,POLO_box	12.2
450506	NM_004460	Hs.418	fibroblast acti	SS,DPPIV_N_term,Peptidase_S9	12.1
425782	U66468	Hs.159525	cell growth reg	SS	12.0
426108	AA622037	Hs.166468	programmed cell	TM,DUF122	11.9
450236	AW162958	Hs.24684	KIAA1376 protei	TM,SS	11.7
452838	U65011	Hs.30743	preferentially	TM	11.2
426780	BE242284	Hs.172199	adenylate cycla	TM,guanylate_cyc	11.1
415323	BE269352	Hs.949	neutrophil cyto	TM,SH3,TPR	11.0
423508	AW604297	Hs.129711	hepatitis A vir	TM,SS,Ig	11.0
408380	AF123050	Hs.44532	dubiquitin	TM,ubiquitin,7tm_3,ANF_receptor,sushi,7tm_1	11.0
448410	AK000227	Hs.21126	hypothetical pr	TM	11.0
451277	AK001123	Hs.26178	hypothetical pr	TM	10.8
453165	S74727	Hs.32042	aspartacylase	TM	10.8
418036	Z37976	Hs.83337	latent transfor	SS,TB,EGF	10.5
431512	BE270734	Hs.2795	lactate dehydro	TM,ldh	10.3
433862	D86960	Hs.3610	KIAA0205 gene p	TM,SS	10.3
431211	M88849	Hs.5566	gap junction pr	TM,connexin	10.2
432579	AF043244	Hs.278439	nucleolar prote	TM	10.0
439653	AW021103	Hs.6631	hypothetical pr	TM,SS	9.9
428862	NM_000346	Hs.2316	SRY (sex-determ	TM,HMG_box	9.8
410762	AF226053	Hs.66170	HSKM-B protein	SS,zf-MYND	9.8
452431	U88879	Hs.29499	tol-like recep	TM,SS,TIR,LRRC1	9.5
405121	AB028989	Hs.88500	mitogen-activat	SS,vwa,vwd,TIL,Cys_knot,vwc	9.5
449625	NM_014253	Hs.23796	odc (odd Ozien	SH2,EGF	9.4
421659	NM_014459	Hs.105511	protocadherin 1	TM,SS,cadherin	9.2
427283	AL119796	Hs.174185	ectonucleotide	TM,SS,Phosphodiester,Somatostatin_B	9.1
407975	X89426	Hs.41716	endothelial cel	SS,IGFBP	8.9
413554	AA319146	Hs.75426	secretogranin I	TM,SS,Gratin	8.6
418693	AI750878	Hs.87409	thrombospondin	EGF,TSPN.tsp_1.tsp_3,vwc	8.6
437672	AW748265	Hs.5741	flavohemoprotei	TM,heme_1,oxidoreductase	8.6
430268	AK000737	Hs.237480	hypothetical pr	TM,SS	8.5
447850	AB018298	Hs.19822	SEC24 (S. cerev	TM	8.4
435717	AF227905	Hs.105794	UDP-glucose:gly	TM,Glyco_transf_8	8.3
433376	AI249361	Hs.74122	caspase 4, apop	TM,ICE_p20,ICE_p10,CARD	8.2
419490	NM_006144	Hs.90708	granzyme A (gra	TM,SS,trypsin	8.2
453033	AA325869	Hs.31463	KIAA0281 gene p	TM	8.2
432328	AI572739	Hs.195471	6-phosphotructo	TM,6PF2K,PGAM	7.9
413719	BE439580	Hs.75498	small inducible	SS,IL8	7.9
412448	L12964	Hs.73895	tumor necrosis	TM,SS,TNFR_c6	7.9
424247	X14008	Hs.234734	lysosome (renal	SS,lvs	7.9
421991	NM_014918	Hs.110488	KIAA0990 protei	SS	7.8
400793	AA635062	Hs.50094	Homo sapiens mR	TM,BIR,CARD,zf-C3HC4	7.7

	414646	AA353776	Hs.901	CD48 antigen (B	TM,Ig	7.6
	418372	AA311833	Hs.84318	replication pro	TM	7.6
	408418	AW963897	Hs.44743	KIAA1435 protei	TM,WD40,FYVE	7.6
5	425354	U82027	Hs.155935	complement comp	TM,7tm_1	7.5
	432753	NM_014075	Hs.278915	PRO0593 protein	TM,kinase	7.4
	447046	AA326187	Hs.17170	G protein-coupl	TM,7tm_1	7.4
	410577	X91911	Hs.64839	glioma pathogen	TM,SCP	7.4
	422631	BE218919	Hs.118793	hypothetical pr	TM	7.3
10	417022	NM_014737	Hs.80905	Ras association	TM,RA	7.2
	430105	X70297	Hs.2540	cholestergic rec	TM,neur_chan	7.2
	451621	AB79148	Hs.26770	fatty acid bind	TM,SS,lipocatin	7.2
	415138	C18356	Hs.78045	tissue factor p	Kunitz_BPTI,G-gamma	7.2
	426028	NM_001110	Hs.172028	a disintegrin a	TM,SS,disintegrin,Reprolysin	7.2
15	434098	AW662958	Hs.75825	pleiomorphic ad	TM,zf-C2H2	7.1
	426423	NM_012446	Hs.169833	single-stranded	TM	7.1
	412783	BE276738	Hs.74578	DEAD/H (Asp-Glu	TM,dsm,helicase_C	7.1
	431556	AF016028	Hs.260039	sarcospan (Kras	TM	6.9
	420018	U56387	Hs.94376	proprotein conv	TM,SS,Peptidase_S8,P	6.9
20	444042	NM_004915	Hs.10237	ATP-binding cas	TM,ABC_tran	6.9
	432656	NM_000246	Hs.3076	MHC class II tr	TM,LRR	6.9
	430066	AF929659	Hs.237825	signal recognit	TM,TPR	6.9
	401539				TM,SS,zf-B_box,zf-C3HC4,Lysyl_coxidase	6.8
	416058	L08895	Hs.78995	MADS box transc	TM,SRF-TF	6.8
25	413249	AF167160	Hs.75251	DEAD/H (Asp-Glu	TM,SAP	6.7
	424063	NM_002019	Hs.138671	fms-related tyr	TM,SS,kinase,lg	6.7
	418026	BE379727	Hs.83213	fatty acid bind	TM,SS,lipocatin	6.6
	438619	AB032773	Hs.6341	TU12B1-TY prote	TM	6.6
	408741	M73720	Hs.646	carboxypeptidas	SS,Zn_carbOpept,Propep_M14	6.6
30	403549				TM,kinase	6.6
	435798	BE395289	Hs.12720	eIF4E-transport	TM	6.6
	453070	AK001465	Hs.31575	SEC63, endoplas	TM,SS,DnaJ	6.6
	452092	BE245374	Hs.27842	hypothetical pr	TM,SS,Acyltransferase	6.5
	437396	BE140396	Hs.21621	hypothetical pr	TM	6.4
35	402474				TM,Peptidase_C1	6.4
	401600	BE247275	Hs.151787	U5 snRNP-specif	TM,SS,HECT	6.4
	415076	NM_000857	Hs.77890	guanylate cyclase	TM,guanylate_cyc	6.4
	430335	D80007	Hs.239499	KIAA0185 protei	TM,S1	6.3
	434203	BE262677	Hs.283658	hypothetical pr	TM	6.2
40	430287	AW182459	Hs.125759	ESTs, Weakly si	TM,SS	6.2
	417259	AW903838	Hs.81800	chondroitin sul	TM,Xink,lectin_c,sushi,EGF,lg	6.1
	421202	AF193339	Hs.102506	eukaryotic tran	TM,SS	6.1
	452235	AL039743	Hs.28514	Homo sapiens mR	TM	6.0
	429653	NM_005955	Hs.211581	metal-regulator	TM,zf-C2H2	6.0
45	444484	AK002126	Hs.11260	hypothetical pr	TM	5.9
	410193	AJ132592	Hs.59757	zinc finger pro	TM,zf-C2H2	5.9
	425361	AA355933	Hs.132221	Homo sapiens cD	TM	5.9
	410361	BE391804	Hs.62661	guanylate bindi	TM,SS,GBP	5.8
	415714	NM_002290	Hs.78672	laminin, alpha	TM,SS,laminin_G,laminin_EGF	5.8
50	421689	N87820	Hs.106826	hypothetical pr	TM,SS,PHD	5.8
	443837	AF984625	Hs.9884	spindle pole bo	SS	5.8
	422544	AB018259	Hs.118140	KIAA0716 gene p	TM	5.7
	412584	X54870	Hs.74085	DNA segment on	TM,lectin_c	5.7
	410425	BE278367	Hs.63510	KIAA0141 gene p	TM	5.7
55	426283	NM_003937	Hs.169139	kynureninase (L	TM	5.7
	430440	X52599	Hs.2561	nerve growth fa	TM,SS,NGF	5.7
	413551	BE242639	Hs.75425	ubiquitin assoc	TM,SS,U8A	5.7
	418250	U29926	Hs.83918	adenosine monop	TMA_deaminase	5.6
	419839	U24577	Hs.93304	phospholipase A	SS	5.6
60	430253	AK001514	Hs.236844	hypothetical pr	TM	5.6
	450447	AF212223	Hs.25010	hypothetical pr	TM,ANF_receptor,guanylate_cyc,kinase	5.6
	414020	NM_002984	Hs.75703	small inducible	SS,IL8	5.6
	414844	AA296874	Hs.77494	deoxyguanosine	SS,dNK	5.6
	416498	U33632	Hs.79351	potassium chann	TM	5.6
65	430512	AF182294	Hs.241578	U6 snRNA-associ	SS	5.6
	419929	U90268	Hs.93810	cerebral cavern	SS,ank,Band_41	5.5
	407094	AF000574	Hs.22405	leukocyte immun	TM,SS,lg	5.5
	411853	AF070578	Hs.71168	Homo sapiens cl	TM,SS,Aa_trans	5.5
	452355	N54926	Hs.29202	G protein-coupl	TM,7tm_1	5.5
70	440486	BE243513	Hs.7212	hypothetical pr	TM	5.5
	444825	AW167613	Hs.248	mitogen-activat	TM,SS,kinase	5.5
	447072	D61594	Hs.17279	tyrosylprotein	SS	5.4
	453392	U23752	Hs.32564	SRY (sex determ	TM,HMG_box	5.4
	411213	AA676939	Hs.69285	neurofilin 1	TM,CUB,F5_F8_type_C,MAM	5.4
75	429688	BE245169	Hs.211610	CUG triplet rep	TM,rm	5.4
	405257				TM	5.4
	414911	NM_000107	Hs.77602	damage-specific	TM,WD40	5.3
	430598	AK001764	Hs.247112	hypothetical pr	TM	5.3
	428753	AW939252	Hs.192927	hypothetical pr	TM,SS	5.3
80	406625	Y13647	Hs.119597	stearoyl-CoA de	TM,Desaturase	5.3
	405475				TM,sugar_tr	5.3
	430180	AA331406	Hs.75456	A kinase (PRKA)	TM	5.3
	417381	AF164142	Hs.82042	solute carrier	TM,xan_ur_permease	5.3
	433029	NM_014322	Hs.279926	opsin 3 (enceph	TM,7tm_1	5.3

417355	D13168	Hs.82002	endothelin rece	TM,SS,7tm_1,24-C3HC4	5.3
412420	AL035668	Hs.73853	bone morphogene	SS,TGFb_propeptide,TGF-beta	5.2
416975	NM_004131	Hs.1051	granzyme B (gra	SS,trypsin	5.2
451418	BE387790	Hs.26369	hypothetical pr	TM	5.2
425322	U53630	Hs.155637	protein kinase,	TM,MCM,FATC,P13_P14_kinase	5.2
415910	U20350	Hs.78913	chemokine (C-X3	TM,7tm_1	5.2
428593	AW207440	Hs.185973	degenerative sp	TM	5.2
417696	BE241624	Hs.82401	CD69 antigen (p	TM,lectin_c	5.2
442991	BE281238	Hs.8888	hypothetical pr	TM	5.2
420567	AK000812	Hs.98874	similar to prol	TM	5.1
412676	NM_000165	Hs.74471	gap junction pr	TM,connexin	5.1
423430	AF112481	Hs.128501	RAD54, S. cerev	TM,SNF2_N,helicase_C	5.1
421633	AF121860	Hs.106260	sorting nexin 1	TM,PX	5.1
436943	AA773838	Hs.5353	caspase 10, apo	TM,ICE_p10,ICE_p20,DED	5.1
414696	AF002020	Hs.76918	Niemann-Pick di	TM,SS,Patched	5.1
446312	BE087853		gb:QV1-8T0681-2	TM	5.0
420397	NM_007018	Hs.97437	centrosomal pro	TM	5.0
410274	AA381807	Hs.61762	hypoxia-inducib	SS	5.0

20	TABLE 36B*	
	Pkey:	Unique Eos probeset identifier number
	CAT number:	Gene cluster number
	Accession:	Genbank accession numbers

25	Pkey	CAT number	Accession
	446312	671114_1	BE087853 AJ286184

30	TABLE 36C:	
	Pkey:	Unique number corresponding to an Eos probeset
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
	Strand:	Indicates DNA strand from which exons were predicted.
	Nt_position:	Indicates nucleotide positions of predicted exons.

35	Pkey	Ref	Strand	Nt_position
	401539	8072433	Minus	62028-62608
	402474	7547175	Minus	53528-53628,55755-55920,57530-57757
	403549	8081591	Minus	137150-137362
40	405257	7329310	Plus	73121-73273
	405475	1931025	Plus	1548-1702

45	TABLE 37A: ABOUT 280 GENES DOWN-REGULATED IN KIDNEY CANCER	
	Table 37A lists about 280 genes significantly down-regulated in kidney cancer compared to normal kidney. These were selected as for Table 35A, except that the numerator and denominator were switched.	

50	Pkey:	Unique Eos probeset identifier number
	ExAccon:	Exemplar Accession number, Genbank accession number
	UnigeneID:	Unigene number
	Unigene Title:	Unigene gene title
	R1:	Ratio of normal to tumor tissue

	Pkey	ExAccon	UnigeneID	UnigeneTitle	R1
55	425260	L47726	Hs.1870	phenylalanine hydroxylase	50.20
	445835	AJ769774	Hs.209831	ESTs, Weakly similar to ALU1_HUMAN ALU S	48.14
	440243	BE301029	Hs.226422	ESTs	42.54
	431657	AJ345227	Hs.105448	ESTs, Weakly similar to B34087 hypothet	40.14
	441120	AI632015	Hs.164492	ESTs	34.56
	432488	AA551010	Hs.216640	ESTs	33.16
60	416854	H40164	Hs.80296	Purkinje cell protein 4	32.06
	438452	AI220911	Hs.288959	Homo sapiens cDNA: FLJ20920 fis, clone A	29.54
	414523	AU076633	Hs.76353	serine (or cysteine) proteinase inhibito	28.26
	430250	NM_016929	Hs.283021	chloride intracellular channel 5	28.16
	446795	AJ797713	Hs.156471	ESTs	27.23
65	451949	U03884	Hs.463	potassium inwardly-rectifying channel, s	26.98
	432128	AA127221	Hs.117037	ESTs	26.54
	448178	AI479482	Hs.170789	ESTs	25.42
	436639	D14838	Hs.111	fibroblast growth factor 9 (gla-activat	23.99
	426770	AI948618	Hs.150178	ESTs	23.78
70	428839	AJ767756	Hs.82302	ESTs	23.04
	431124	AF284221	Hs.59506	doublesex and mab-3 related transcriptio	22.38
	413333	M74028	Hs.75297	fibroblast growth factor 1 (acidic)	22.28
	437575	AW954355	Hs.36529	ESTs	22.14
	451062	AL110125	Hs.25910	Homo sapiens mRNA; cDNA DKFZp564C1416 (f	22.12
75	447350	AI375572	Hs.172634	ESTs	20.40
	425920	AL049977	Hs.162209	claudin 8	20.30
	446293	AI420213	Hs.149722	ESTs	19.48
	425075	AA506324	Hs.1852	acid phosphatase, prostate	19.10
80	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	18.74
	430130	AL137311	Hs.234074	Homo sapiens mRNA; cDNA DKFZp761G02121 (	18.56
	441560	F13386	Hs.7888	Homo sapiens clone Z3736 mRNA sequence	17.40
	434880	U02388	Hs.101	cytochrome P450, subfamily IVF, polypept	17.30
	405687	M12523	Hs.75442	albumin	17.06
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	16.54

	418021	M15881	Hs.1137	uromodulin (uromucoid, Tamm-Horsfall gly	16.11
	410681	AW246890	Hs.65425	calbindin 1, (28kD)	15.84
	443324	R44013	Hs.164225	ESTs	15.68
5	421285	NM_000102	Hs.1363	cytochrome P450, subfamily XVII (steroid	15.46
	436637	A1783629	Hs.26766	ESTs	15.18
	448406	AW772298	Hs.21103	Homo sapiens mRNA; cDNA DKFZp564B076 (fr	14.52
	434874	N62448	Hs.135908	ESTs	14.46
	407744	AB020629	Hs.38095	ATP-binding cassette, sub-family A (ABC1	13.84
10	453685	AL110309		gb:DKFZp564L0278_r1 564 (synonym: hbr2)	13.48
	451939	U80456	Hs.27311	single-minded (Drosophila) homolog 2	13.24
	436624	T64297	Hs.5241	fatty acid binding protein 1, liver	13.05
	428931	AA994979	Hs.98967	ATPase, H(+)-transporting, lysosomal, no	12.97
	424823	NM_006226	Hs.153322	phosphopase C, epsilon	12.66
15	431713	AK000388	Hs.267997	EHM2 gene	12.66
	436679	A1127483	Hs.120451	ESTs, Weakly similar to unnamed protein	12.36
	413859	AW992356	Hs.8364	pyruvate dehydrogenase kinase, isoenzyme	12.32
	425707	AF115402	Hs.11713	E74-like factor 5 (ets domain transcript	11.92
	440504	A1948966	Hs.130017	ESTs, Weakly similar to VATX_HUMAN VACUO	11.66
20	417275	X63578	Hs.81849	parvalbumin	11.48
	410929	H47233	Hs.30643	ESTs	11.40
	427167	A1239607	Hs.99196	ESTs	11.34
	445591	A1471866	Hs.149095	ESTs	11.30
	443622	A1911527	Hs.11805	ESTs	11.23
25	438935	H40665	Hs.31564	ESTs	11.16
	438461	AW075485	Hs.286049	phosphoserine aminotransferase	11.00
	415539	A1733881	Hs.72472	ESTs	10.84
	438081	H49546	Hs.298964	ESTs	9.76
	421688	AK000307	Hs.106825	hypothetical protein FLJ20300	9.74
30	407280	A1241296	Hs.145609	ESTs	9.71
	427959	NM_001963	Hs.2230	epidermal growth factor (beta-urogastron	9.61
	442448	A1733144	Hs.129511	ESTs	9.52
	442308	AA989402	Hs.45194	ESTs	9.51
	410467	AF102546	Hs.63931	dachshund (Drosophila) homolog	9.35
35	429469	M64590	Hs.27	glycine dehydrogenase (decarboxylating;	9.32
	418068	AW971155	Hs.293902	ESTs, Weakly similar to prollyl 4-hydroxy	9.31
	459247	N48243	Hs.110373	ESTs	9.20
	423629	AW021173	Hs.18612	Homo sapiens cDNA: FLJ21909 fis, clone H	9.16
	410247	AF181721	Hs.61345	RJ25	9.10
40	430573	AA744550	Hs.136345	ESTs	9.08
	457411	AW085961	Hs.130093	ESTs	8.99
	447390	NM_003500	Hs.9795	acyl-Coenzyme A oxidase 2, branched chai	8.92
	435024	A1863518	Hs.127743	ESTs, Weakly similar to V-ATPase G-subun	8.76
	435056	AW023337	Hs.5422	glycoprotein M6B	8.74
45	426451	A1908165	Hs.169946	GATA-binding protein 3	8.50
	450648	A1703366	Hs.26766	ESTs	8.38
	426255	BE262530	Hs.2006	glutathione S-transferase M3 (brain)	8.31
	431820	AW410408	Hs.271167	L-peptidic acid oxidase	8.28
	451027	AW519204	Hs.40808	ESTs	8.10
50	435823	R07856	Hs.16355	ESTs	8.06
	429269	AA449013	Hs.99203	ESTs	8.02
	438199	AW016531	Hs.122147	ESTs	7.94
	442176	AA983764	Hs.128910	ESTs	7.94
	450164	A1239923	Hs.30098	ESTs	7.86
55	445627	AW818475	Hs.7363	ESTs	7.85
	445779	A1253104	Hs.189267	ESTs	7.82
	407178	AA195651	Hs.104106	ESTs	7.68
	426966	AM93134	Hs.159125	ESTs	7.68
	445659	AW300508	Hs.149229	ESTs	7.50
60	403204				7.48
	448037	AW195634	Hs.170401	ESTs	7.30
	413589	AW452631	Hs.258811	coatomer protein complex, subunit gamma	7.26
	446063	A1720140	Hs.151079	ESTs	7.26
	424626	AA344308	Hs.128427	ESTs	7.25
65	403381				7.16
	414807	A1738616	Hs.77348	hydroxyprostaglandin dehydrogenase 15-(N	7.12
	432102	AW015506	Hs.130730	ESTs	7.12
	442315	AA173992	Hs.7956	ESTs	7.10
	453698	AA037615	Hs.42746	ESTs	7.02
70	415003	M11437	Hs.77741	kininogen	6.95
	426418	M90464	Hs.169825	collagen, type IV, alpha 5 (Alport syndr	6.92
	452883	X80031	Hs.150318	ESTs	6.88
	408621	A1970872	Hs.46638	chromosome 11 open reading frame 8	6.76
	410781	A1375672	Hs.165028	ESTs	6.74
	424596	AB020639	Hs.151017	estrogen-related receptor gamma	6.66
75	441031	A1110684	Hs.7645	fibrinogen, B beta polypeptide	6.66
	451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	6.64
	437553	A1829935	Hs.130497	ESTs, Weakly similar to MAT8_HUMAN CHLOR	6.63
	445286	U03888	Hs.264	GS2 gene	6.54
80	408427	AW194270	Hs.177236	ESTs	6.52
	410442	X73424	Hs.63788	propionyl Coenzyme A carboxylase, beta p	6.46
	457001	J03258	Hs.2062	vitamin D (1,25- dihydroxyvitamin D3) re	6.46
	420205	AA256395	Hs.88156	ESTs	6.42
	441364	AW450466	Hs.126830	ESTs	6.36

	425649	U30930	Hs.158540	UDP glycosyltransferase 8 (UDP-galactose	6.34
	405373				6.32
	431322	AW970622		gb:EST382704 MAGE resequences, MACK Homo	6.32
	440094	AI651558	Hs.270372	ESTs	6.27
5	442764	AI762254	Hs.131122	ESTs	6.21
	424433	H04607	Hs.9218	ESTs	6.20
	415025	AW207091	Hs.72307	ESTs	6.16
	429827	AA441837	Hs.90250	ESTs	6.16
	439145	H67346	Hs.269187	ESTs	6.06
10	424683	N87519	Hs.27196	ESTs	6.04
	415314	N88802	Hs.5422	glycoprotein M6B	5.94
	424025	AI701852	Hs.301296	ESTs	5.90
	445911	AI985987	Hs.145645	ESTs, Moderately similar to ALU1_HUMAN A	5.89
	417332	AW972717	Hs.268462	Homo sapiens cDNA: FLJ21511 fs, clone C	5.86
15	440102	AI672443	Hs.131190	ESTs	5.84
	429609	AF002246	Hs.210863	cell adhesion molecule with homology to	5.82
	411666	AF106564	Hs.71346	neurofilament 3 (150kD medium)	5.82
	446224	AW450551	Hs.13308	ESTs	5.74
	422305	AI928242	Hs.293438	ESTs, Highly similar to AF198488 1 trans	5.72
20	436802	N34486	Hs.170504	ESTs	5.72
	412452	AA215731	Hs.283446	ESTs, Weakly similar to ALAT_HUMAN ALANI	5.70
	445611	AW418497	Hs.145583	ESTs	5.66
	440038	AA881627	Hs.243989	ESTs	5.66
	424028	AF055084	Hs.153692	KIAA0686 protein	5.61
25	410530	M25809	Hs.64173	ESTs, Highly similar to VAB1_HUMAN VACUO	5.60
	425907	AA365752	Hs.155965	ESTs	5.60
	428523	AW974540	Hs.98626	ESTs	5.58
	429918	AW873986	Hs.118383	ESTs	5.58
30	408369	R38438	Hs.182575	solute carrier family 15 (H+/peptide tra	5.56
	446163	AA026680	Hs.25252	Homo sapiens cDNA FLJ13603 fs, clone PL	5.56
	427398	AW390020	Hs.20415	chromosome 21 open reading frame 11	5.52
	418504	BE159718	Hs.85335	Homo sapiens mRNA; cDNA DKFZp564D1462 (f	5.51
	440666	AA902650	Hs.192742	Homo sapiens cDNA FLJ12785 fs, clone NT	5.50
35	432286	AW327432	Hs.255843	ESTs	5.48
	451236	AI767406	Hs.207026	ESTs, Weakly similar to B56205 transcrip	5.46
	422746	NM_004484	Hs.119651	glypican 3	5.43
	416426	AA180258	Hs.210473	ESTs, Weakly similar to GELS_HUMAN GELSO	5.37
	414449	AA557660	Hs.76152	decorin	5.36
40	445898	AF070623	Hs.13423	Homo sapiens clone 24468 mRNA sequence	5.34
	451835	T63643	Hs.209715	ESTs, Weakly similar to ALU7_HUMAN ALU S	5.32
	424566	M16801	Hs.1790	nuclear receptor subfamily 3, group C, m	5.22
	408604	D51408	Hs.21925	ESTs	5.18
	456576	AA287443		gb:z52c10.r1 NCI_CGAP_GCB1 Homo sapiens	5.18
45	433212	BE218049	Hs.121820	ESTs	5.16
	452114	N22687	Hs.8236	ESTs	5.14
	458072	AI890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fs, clone K	5.14
	443005	AI027184	Hs.200918	ESTs	5.14
	408554	AA836381	Hs.7323	ESTs	5.12
50	438609	T62870	Hs.291991	ESTs	5.10
	429343	AK000785	Hs.199480	epsin 3	5.10
	452223	AA425467	Hs.8035	ESTs	5.10
	446925	AW974605	Hs.176669	ESTs	5.09
	407664	AW063476	Hs.279080	ESTs	5.08
55	414664	AA587775	Hs.66295	Homo sapiens HSPC311 mRNA, partial cds	5.06
	407978	AW385129	Hs.41717	phosphodiesterase 1A, calmodulin-depende	5.04
	435343	AW194962	Hs.199028	ESTs	5.04
	419150	T29618	Hs.89640	TEK tyrosine kinase, endothelial (venous	5.04
	442317	AI915599	Hs.129225	ESTs	5.02
60	404319				5.02
	433637	AW024214	Hs.135405	ESTs	4.92
	440205	T86950	Hs.188465	ESTs	4.84
	432029	D31628	Hs.2899	4-hydroxyphenylpyruvate dioxygenase	4.83
	453125	AW779544	Hs.115497	Homo sapiens cDNA: FLJ22655 fs, clone H	4.80
65	407788	BE514982	Hs.38991	S100 calcium-binding protein A2	4.78
	439750	AL359053	Hs.57664	Homo sapiens mRNA full length insert cDN	4.75
	443633	AL031290	Hs.9654	similar to pregnancy-associated plasma p	4.74
	449050	AW302858	Hs.187333	ESTs	4.69
	422237	M13149	Hs.1498	histidine-rich glycoprotein	4.67
	442476	AF069475		gb:AF069475 Homo sapiens astrocytoma fib	4.64
70	431130	NM_006103	Hs.2719	epididymis-specific, whey-acidic protein	4.58
	440624	AF017987	Hs.7306	secreted frizzled-related protein 1	4.58
	403046				4.51
	450838	R65841	Hs.28653	ESTs	4.48
75	455887	BE154173		gb:PM1-HT0340-201299-004-112 HT0340 Homo	4.47
	453500	AI478427	Hs.43125	ESTs	4.40
	405701				4.37
	426657	NM_015865	Hs.171731	solute carrier family 14 (urea transport	4.37
80	451032	W03692	Hs.25832	Homo sapiens mRNA; cDNA DKFZp564P116 (fr	4.37
	426200	AA371876	Hs.234786	KIAA0707 protein	4.35
	418836	AI655499	Hs.161712	ESTs	4.34
	447754	AW073310	Hs.163533	Homo sapiens cDNA FLJ14142 fs, clone MA	4.32
	438209	AL120659	Hs.6111	KIAA0307 gene product	4.23
	404559				4.22

413272	AA127923	Hs.293256	ESTs	4.21
423068	M25629	Hs.123107	kallikrein 1, renal/pancreas/salivary	4.19
416982	J05401	Hs.80691	creatine kinase, mitochondrial 2 (sarcom	4.18
445512	AI241246	Hs.148903	EST	4.17
445177	AI215070	Hs.16135	ESTs	4.16
448475	BE613134	Hs.247474	Homo sapiens cDNA: FLJ21032 fs, clone C	4.14
402072				4.09
439285	AL133916	Hs.298998	ESTs	4.02
429621	AI823386	Hs.130874	Homo sapiens cDNA FLJ14181 fs, clone NT	3.99
450273	AW296454	Hs.24743	hypothetical protein FLJ20171	3.97
453511	AL031224	Hs.33102	transcription factor AP-2 beta (activat	3.94
452620	AA436504	Hs.119286	ESTs	3.92
425642	X91220	Hs.156462	solute carrier family 12 (sodium/chlorid	3.91
435984	AA701443	Hs.192868	ESTs	3.90
416889	AW250318	Hs.80395	mal, T-cell differentiation protein	3.89
419677	N77342	Hs.21851	Homo sapiens cDNA FLJ12900 fs, clone NT	3.88
431958	X83629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	3.84
456844	AI264155	Hs.152981	CDP-diacylglycerol synthase (phosphatida	3.82
442306	AB206660	Hs.129205	ESTs	3.82
438453	D17056	Hs.288359	Homo sapiens cDNA: FLJ20920 fs, clone A	3.81
407198	H91679		gb:yy04907.s1 Soares fetal liver spleen	3.80
431441	U81961	Hs.2794	sodium channel, nonvoltage-gated 1 alpha	3.79
413841	M34276	Hs.75578	plasminogen	3.77
431161	AA493591		gb:nh01a12.s1 NCI_CGAP_Thy1 Homo sapiens	3.76
428544	AA430034	Hs.191611	ESTs	3.74
453903	AW299606	Hs.232777	ESTs	3.74
434061	AW024973	Hs.283675	NPD009 protein	3.73
444805	AB007899	Hs.12017	KIAA0439 protein; homolog of yeast ubiq	3.73
440080	AW051597	Hs.143707	ESTs	3.71
440230	AI732970	Hs.126246	ESTs	3.70
428735	AJ279246	Hs.192657	NPHS2 gene (podocin)	3.68
421832	NM_016098	Hs.108725	HSPC040 protein	3.66
430135	NM_000035	Hs.234234	aldolase B, fructose-bisphosphate	3.65
453055	AW291436	Hs.31917	ESTs	3.65
450696	AJ654223	Hs.16026	Homo sapiens cDNA: FLJ23191 fs, clone L	3.59
440232	AI766925	Hs.112554	ESTs	3.57
432099	U20760	Hs.272429	calcium-sensing receptor (hypocalcemic	3.57
445924	AI264671	Hs.164166	ESTs	3.56
411358	H45377		gb:yn99h03.r1 Soares adult brain N2b5HB5	3.56
431103	M57399	Hs.44	pleiotrophin (heparin binding growth fac	3.55
413752	BE161807		gb:MR3-HT0446-300300-203-h01 HT0446 Homo	3.53
416298	NM_003891	Hs.1011	protein Z, vitamin K-dependent plasma gl	3.53
423603	AB007880	Hs.129883	KIAA0420 gene product	3.53
436610	AW611912	Hs.120414	ESTs	3.50
425905	AB032959	Hs.161700	KIAA1133 protein	3.48
403625				3.47
425210	AA054679	Hs.155150	ribonuclease P (14kD)	3.45
430168	AW968343	Hs.300896	ESTs, Highly similar to AF128113 1 promi	3.42
448877	AI583696	Hs.253313	ESTs	3.40
456686	AI554303	Hs.35982	Homo sapiens cDNA FLJ12776 fs, clone NT	3.38
414725	AA769791	Hs.120355	Homo sapiens cDNA FLJ13148 fs, clone NT	3.37
453574	AI767947	Hs.50841	ESTs, Weakly similar to tufetin [M.musc	3.32
438535	L09078		gb:Homo sapiens mRNA fragment	3.31
414040	N58513	Hs.32171	ESTs	3.30
451416	AW631469	Hs.203213	ESTs	3.30
444564	AI167877	Hs.143716	ESTs	3.29
408001	AA046458	Hs.95296	ESTs	3.27
406666	V00495	Hs.75442	albumin	3.24
421750	AK000768	Hs.107872	hypothetical protein FLJ20761	3.24
445337	NM_013280	Hs.12523	fibronectin leucine rich transmembrane p	3.23
423968	AF098277	Hs.136529	solute carrier family 23 (nucleobase tra	3.21
427209	H05509	Hs.92423	KIAA1566 protein	3.20
403442				3.20
419713	AW968058	Hs.92381	nudix (nucleoside diphosphate linked mol	3.19
425548	AA890023	Hs.1906	prolactin receptor	3.17
414502	AL133721	Hs.224680	ESTs	3.16
427811	M81057	Hs.180884	carboxypeptidase B1 (tissue)	3.14
436330	NM_004413	Hs.109	dipeptidase 1 (renal)	3.11
433942	AW272166	Hs.123465	ESTs	3.11
408692	AL040127	Hs.34074	dipeptidylpeptidase VI	3.10
448819	AI589190	Hs.168372	ESTs	3.10
423041	BE170842	Hs.123123	chloride channel Ka	3.10
454554	AW847505		gb:RC0-CT0210-280999-021-c10 CT0210 Homo	3.10
406664	L34041	Hs.25478	glycerol-3-phosphate dehydrogenase 1 (so	3.10
449850	AW206292	Hs.199751	ESTs	3.08
427450	AB014526	Hs.178121	KIAA0626 gene product	3.08
454788	AW820691		gb:RCS-ST0300-300100-012-H06 ST0300 Homo	3.06
444895	AI674383	Hs.301192	ESTs	3.06
457782	N54493		gb:yy40g05.s1 Soares fetal liver spleen	3.05
429023	NM_000312	Hs.2351	protein C (inactivator of coagulation fa	3.05
427041	AI693661	Hs.97557	ESTs	3.01
434788	AF154121	Hs.102867	sodium-dependent high-affinity dicarboxy	3.01
419003	T78640	Hs.268595	ESTs	3.01

TABLE 37B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Pkey	CAT number	Accession
411356	1240273_1	H45377 H21137 AW838640
413752	1386338_1	BE161807 BE161584 BE161700 BE161748
431161	328713_1	AA493591 AA829120 AA533792
431322	331543_1	AW970622 AA503009 AA502998 AA502989 AA502805 T92188
438535	45946_1	L09078 L03145 L09094 L09098 L03165 L09102
442478	543547_1	AF069475 AF069477 AF069476
453685	977734_1	AL110309 AW088119 H22881
454554	1223842_1	AW847505 AW811792 BE061442 BE061433 AW847506 AW806999 AW806996 BE061438 BE061430 BE142460 BE146499 AW806994 AW809158 AW806991 AW814082 AW806992 BE061669 AW807002 BE146659 AW806995 AW807000 AW845743 AW845747 AW847504 BE142458 BE061431 BE061435 AW847507 BE146650 BE142470 AW814096 AW807012 BE061438 AW807011 AW806993 BE142465 BE142459 BE142462 AW854330 AW854331 BE061434 BE061731 BE142464 AW847501 AW807001 BE142463 AW811800 BE061437 AW811802 BE061440 AW806997 AW806998 BE061745 BE061753
454788	1234694_1	AW820691
455887	1380836_1	BE154173 BE154098 BE154096
456576	201378_1	AA287443 AA419385 BE084078 AI478347
457782	405265_1	N54493 AA679039 N76605
407198		H91679

TABLE 37C:

Pkey: Unique Eos probeset identifier number  
 Ref: reference gi ID  
 Strand: strand identification  
 NL\_position: chromosomal nucleotide position

Pkey	Ref	Strand	NL_position
402072	8117363	Plus	71983-72128
403046	3540153	Minus	55707-55859, 56369-56511
403204	7622392	Plus	16214-16439
403381	9438267	Minus	26009-26178
403442	7210003	Plus	174560-175270
403625	8569879	Plus	6551-7111
404319	9211467	Plus	54436-54608
404559	8748893	Minus	73499-73651, 89575-89739
405373	2076718	Plus	21294-21575
405701	4263751	Plus	93243-93384

TABLE 38A: ABOUT 860 GENES UP-REGULATED IN KIDNEY CANCER COMPARED TO NORMAL ADULT TISSUES

Table 38A lists about 860 genes up-regulated in kidney cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" kidney cancer to "average" normal adult tissues was greater than or equal to 3.0. The "average" kidney cancer level was set to the 90th percentile amongst various kidney cancers. The "average" normal adult tissue level was set to the 70th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal adult tissues

Pkey	ExAccn	UnigenelD	Unigene Title	R1
435013	H91923	Hs.110024		15.71
447768	X88400	Hs.19520	Hs.19520:FXFD domain-containing ion tran	14.07
445178	AI792241	Hs.129614	Hs.129614:kidney-specific membrane prote	12.56
432542	AW083920	Hs.16098	Hs.16098:claudin 2	12.41
443595	AF169312	Hs.9613	NM_016109:Homo sapiens angiotensin-like	11.77
413719	BE439580	Hs.75498	NM_004591:Homo sapiens small inducible c	10.39
436878	BE465204	Hs.47448	Hs.47448:ESTs	10.18
440304	BE159984	Hs.125395	Hs.125395:ESTs	9.95
407065	Y10141			9.58
413049	NM_002151	Hs.823	NM_002151:Homo sapiens hepsin (transmemb	9.51
425983	AK000226	Hs.165619	Hs.165619:mucin and cadherin-like	8.88
423161	AL049227	Hs.124776	Hs.124776:Homo sapiens mRc: cD DKFZp564N1	8.77
430569	AF241254	Hs.178098	Hs.178098:angiotensin I converting enzym	8.45
416768	AA363733	Hs.1032	NM_002909:Homo sapiens regenerating isla	7.94
422357	AF016272	Hs.115418	NM_004062:Homo sapiens cadherin 16, KSP-	7.78
420737	L08098	Hs.99899	NM_001252:Homo sapiens tumor necrosis fa	7.78
409745	AA077391		AA077391:7B14E12 Chromosome 7 Fetal Brai	7.74
413936	AF113676	Hs.297681	NM_000295:Homo sapiens serine (or cystei	7.32
426682	AV660038	Hs.2056	Hs.2056:UDP glycosyltransferase 1 family	7.20
406851	AA609784	Hs.352392	Hs.352392:major histocompatibility compl	7.03
419508	AW997938	Hs.90788	Hs.90788:ATP-binding cassette, sub-famil	6.57
428953	AA306610	Hs.348183	NM_003823:Homo sapiens tumor necrosis fa	6.36
436895	AF037335	Hs.5338	NM_001218:Homo sapiens carbonic anhydras	6.31
431842	NM_005764	Hs.271473	Hs.271473:Homo sapiens epithelial protei	6.20
430014	H59354	Hs.374303	Hs.374303:hypothetical protein MGC20676	6.20
423803	NM_005709	Hs.132945	NM_005709:Homo sapiens PDZ-73 protein (P	6.19

	434779	AF153815	Hs.50151	Hs.50151:potassium inwardly-rectifying c	6.11
	435767	M73505	Hs.117874	Hs.117874:ESTs	6.08
	422664	AA315933	Hs.120879	Hs.120879:Homo sapiens, clone MGC:32871	6.02
5	425280	U31519	Hs.1872	Hs.1872:phosphoenolpyruvate carboxylase	5.81
	426559	AB001914	Hs.170414	NM_002570:Homo sapiens paired basic amin	5.73
	451564	AJ076688	Hs.132760	NM_001467:Homo sapiens glucose-6-phospha	5.69
	418526	BE019020	Hs.85638	NM_004207:Homo sapiens solute carrier fa	5.68
	444151	AW972917	Hs.128749	Hs.128749:alpha-methylacyl-CoA racemase	5.66
10	426471	M22440	Hs.170009	NM_003236:Homo sapiens transforming grow	5.48
	432579	AF043244	Hs.278439	NM_003946:Homo sapiens nucleolar protein	5.45
	448733	NM_005629	Hs.187958	NM_005629:Homo sapiens solute carrier fa	5.42
	446650	AB016625	Hs.15813	NM_003060:Homo sapiens solute carrier fa	5.36
	417089	H52280	Hs.18612	Hs.18612:Homo sapiens cD: FLJ21909 fis,	5.35
15	437848	AJ908419	Hs.284380	Hs.284380:gamma-glutamyltransferase 1	5.32
	423081	AF262992	Hs.123159	Hs.123159:sperm associated antigen 4	5.30
	421893	NM_001078	Hs.109225	NM_001078:Homo sapiens vascular cell adh	5.23
	435886	BE265839	Hs.12126	Hs.12126:hepatocellular carcinoma-associ	5.20
	410276	AJ554545	Hs.359201	Hs.359201:ESTs	5.20
20	429451	BE409861	Hs.202833	NM_002133:Homo sapiens heme oxygenase (dec	5.14
	446404	AA019961	Hs.26216	Hs.26216:Homo sapiens cD: FLJ22811 fis,	5.13
	423445	NM_014324	Hs.128749	NM_014324:Homo sapiens alpha-methylacyl-	5.09
	449444	AW818438	Hs.351306	NM_004698:Homo sapiens solute carrier fa	5.05
	436106	BE245551	Hs.6079	NM_014863:Homo sapiens B cell RAG associ	5.02
25	400419	AF084545		AF084545:Homo sapiens versican Vint isofo	5.01
	453920	AI133148	Hs.36602	NM_000204:Homo sapiens I factor (complem	4.99
	447881	BE620886	Hs.355279	Hs.355279:Homo sapiens cD FLJ23711 fis,	4.97
	422253	W81526	Hs.113882	NM_000815:Homo sapiens gamma-aminobutyri	4.93
	439024	R96696	Hs.35598	Hs.35598:ESTs	4.88
30	414799	AI752416	Hs.77326	NM_000598:Homo sapiens insulin-like grow	4.80
	426530	U24578	Hs.278525	NM_000592:Homo sapiens complement compon	4.77
	410055	AJ250839	Hs.58241	Hs.58241:gene for serine/threonine prote	4.72
	404240				4.71
	414617	AJ339520	Hs.288817	Hs.288817:hypothetical protein FLJ22761	4.68
35	448249	AW855331	Hs.337124	Hs.337124:ESTs	4.67
	447818	W79940	Hs.21906	Hs.21906:Homo sapiens clone 24670 mR seq	4.66
	449057	AB037784	Hs.22941	Hs.22941:KIAA1363 protein	4.66
	422424	AI186431	Hs.296638	NM_004864:Homo sapiens prostate differen	4.62
	417338	R70429	Hs.81988	NM_001343:Homo sapiens disabled homolog	4.62
40	425873	NM_013390	Hs.160417	NM_013390:Homo sapiens transmembrane pro	4.58
	444700	NM_003845	Hs.11729	NM_003845:Homo sapiens fatty-acid-Coenzy	4.58
	414998	NM_002543	Hs.77729	NM_002543:Homo sapiens oxidised low dens	4.56
	414763	U97276	Hs.77266	NM_002826:Homo sapiens quiescin Q6 (QSCN	4.48
	443358	H85417	Hs.17757	Hs.17757:pleckstrin homology domain-cont	4.45
45	440091	AI767388	Hs.37890	Hs.37890:Homo sapiens, clone IMAGE:48275	4.43
	447131	NM_004585	Hs.17466	NM_004585:Homo sapiens retinoic acid rec	4.43
	406973	M34996	Hs.198253	Hs.198253:major histocompatibility compl	4.42
	427740	BE242604	Hs.180616	NM_005505:Homo sapiens CD36 antigen (col	4.40
50	436258	AW867491	Hs.107125	Hs.107125:plasmalemma vesicle associated	4.38
	452884	C05964	Hs.31841	Hs.31841:ESTs	4.37
	444006	BE395085	Hs.10086	NM_016639:Homo sapiens type I transmembr	4.36
	422627	BE336857	Hs.118787	NM_000358:Homo sapiens transforming grow	4.35
	418054	NM_002318	Hs.83354	NM_002318:Homo sapiens lysyl oxidase-like	4.34
	419011	H56244	Hs.89552	NM_000846:Homo sapiens glutathione S-tra	4.34
	404277				4.33
55	435563	AF210317	Hs.95497	Hs.95497:solute carrier family 2 (facili	4.30
	431779	AW971178	Hs.268571	NM_001645:Homo sapiens apolipoprotein C-	4.29
	406645	M57466	Hs.814	Hs.814:major histocompatibility complex,	4.28
	421485	AA243499	Hs.104800	Hs.104800:hypothetical protein FLJ10134	4.26
60	426812	AF105365	Hs.172613	NM_006598:Homo sapiens solute carrier fa	4.25
	407910	AA650274	Hs.41298	NM_013281:Homo sapiens fibronectin leuci	4.22
	438030	X98427	Hs.122634	Hs.122634:ESTs	4.22
	430661	AC005551	Hs.130714	Hs.130714:ESTs, Moderately similar to AF	4.21
	444381	BE387335	Hs.263713	Hs.263713:hypothetical protein BC014245	4.20
65	438203	BE540090	Hs.7345	Hs.7345:MAD1 mitotic arrest deficient-1	4.16
	411356	R47479	Hs.94761	Hs.94761:KIAA1691 protein	4.15
	418323	NM_002118	Hs.1162	NM_002118:Homo sapiens major histocompat	4.12
	449853	AF006823	Hs.24040	NM_002246:Homo sapiens potassium channel	4.11
	415198	AW009480	Hs.943	NM_004221:Homo sapiens tural killer cell	4.11
70	418751	BE389014	Hs.372548	Hs.372548:phosphoinositide-3-kinase, regul	4.09
	414166	AW888941	Hs.75789	NM_006096:Homo sapiens N-myc downstream	4.07
	424125	M31669	Hs.1735	Hs.1735:inhibin, beta B (activin AB beta	4.00
	416926	H03109	Hs.263395	Hs.263395:sema domain, transmembrane dom	3.92
	419175	AW270037	Hs.362996	Hs.362996:KIAA0779 protein	3.92
75	424218	AF031824	Hs.143212	NM_003650:Homo sapiens cystatin F (leuko	3.91
	412870	N22788	Hs.82407	Hs.82407:chemokine (C-X-C motif) ligand	3.88
	452203	X57522	Hs.352018	NM_000593:Homo sapiens transporter 1, AT	3.87
	446872	X97058	Hs.16362	NM_004154:Homo sapiens pyrimidinergic re	3.87
	449961	AW265634	Hs.133100	Hs.133100:ESTs	3.87
80	424517	AI539443	Hs.137447	Hs.137447:Homo sapiens cD FLJ12169 fis,	3.86
	425262	D87119	Hs.155418	Hs.155418:GS3955 protein	3.83
	443639	BE269042	Hs.9661	NM_002801:Homo sapiens proteasome (proso	3.82
	448133	AA723157	Hs.73769	NM_000802:Homo sapiens folate receptor 1	3.81
	418030	BE207573	Hs.83321	Hs.83321:neurexin B	3.81



412939	AW411491	Hs.75069	NM_005412:Homo sapiens serine hydroxymet	3.80
408162	H25530	Hs.50868	NM_002555:Homo sapiens solute carrier fa	3.79
427715	BE245274	Hs.180428	Hs.180428:KIAA1181 protein	3.78
412006	AW451618	Hs.290216	Hs.290216:ESTs	3.77
430413	AW842182	Hs.241392	NM_002985:Homo sapiens small inducible c	3.76
422282	AF019225	Hs.114309	Hs.114309:apolipoprotein L 1	3.76
420747	BE294407	Hs.99910	Hs.99910:phosphofructokinase, platelet	3.76
414875	H42679	Hs.77522	NM_006120:Homo sapiens major histocompat	3.75
418793	AW382987	Hs.88474	Hs.88474:prostaglandin-endoperoxide synd	3.74
446291	BE397753	Hs.14623	NM_006332:Homo sapiens interferon, gamma	3.71
417289	D86962	Hs.81875	Hs.81875:growth factor receptor-bound pr	3.69
422672	X12784	Hs.119129	NM_001845:Homo sapiens collagen, type IV	3.68
448569	BE382657	Hs.21486	NM_007315:Homo sapiens sigt transducer a	3.68
437270	R18087	Hs.323769	Hs.323769:cisplatin resistance related p	3.67
408452	AA054683	Hs.182455	Hs.182455:ESTs, Moderately similar to hy	3.67
443986	AI381750	Hs.283437	Hs.283437:HTGN29 protein	3.68
418869	AW516565		AW516565:xq01q05.x1 Soares_NHCc_cervica	3.65
425998	AU076629	Hs.165950	NM_002011:Homo sapiens fibroblast growth	3.62
428699	AW578252	Hs.190161	NM_014020:Homo sapiens LR8 protein (LR8)	3.62
418299	AA279530	Hs.83968	NM_000211:Homo sapiens integrin, beta 2	3.61
432593	AW301003	Hs.51483	Hs.51483:Homo sapiens, Similar to RIKEN	3.59
415765	NM_005424	Hs.78824	NM_005424:Homo sapiens tyrosine kase wil	3.58
445985	BE621800	Hs.29444	Hs.29444:putative small membrane protein	3.57
424893	AW295112	Hs.153648	Hs.153648:protein tyrosine phosphatase,	3.57
426046	AA833655	Hs.206868	Hs.206868:Homo sapiens cD FLJ14056 fs,	3.57
424415	NM_001975	Hs.146580	NM_001975:Homo sapiens enolase 2, (gamma	3.57
412612	NM_000047	Hs.74131	NM_000047:Homo sapiens arylsulfatase E (	3.56
443834	AI741510	Hs.173548	Hs.173548:ESTs	3.54
431630	NM_002204	Hs.265829	NM_002204:Homo sapiens integrin, alpha 3	3.53
418371	M13560	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	3.52
444838	AV651680	Hs.208558	Hs.208558:ESTs	3.52
449378	AW664026	Hs.59892	Hs.59892:ESTs, Weakly similar to alpha 5	3.52
411393	AW797437	Hs.69771	NM_001710:Homo sapiens B-factor, propepd	3.50
414311	AI693547	Hs.71746	Hs.71746:aminopeptidase-like 1	3.50
415149	X12451	Hs.78056	NM_001912:Homo sapiens cathepsin L (CTSL	3.50
424321	W74048	Hs.1765	Hs.1765:lymphocyte-specific protein tyro	3.49
414825	X06370	Hs.77432	NM_005226:Homo sapiens epidermal growth	3.48
408194	AA601038	Hs.191797	Hs.191797:ESTs	3.48
410600	AW575742	Hs.351676	Hs.351676:ESTs, Weakly similar to T02670	3.47
416899	BE262645	Hs.80420	NM_002996:Homo sapiens small inducible c	3.47
436856	AI469355	Hs.127310	Hs.127310:hypothetical protein BC014917	3.47
419660	BE280337	Hs.194693	NM_003982:Homo sapiens solute carrier fa	3.47
413566	AW604451	Hs.285814	Hs.285814:growth factor receptor-bound p	3.47
412104	AW205197	Hs.240951	Hs.240951:kad cuticle homolog 2 (Drosoph	3.46
444488	AW192879	Hs.355660	Hs.355660:peptide-histidine transporter	3.46
449475	AI348027	Hs.108557	Hs.108557:hypothetical protein PP1057	3.46
412276	BE262621	Hs.73798	NM_002415:Homo sapiens macrophage migrat	3.45
449338	H73444	Hs.394	NM_001124:Homo sapiens adrenomedullin (A	3.44
430304	AL122071	Hs.238927	Hs.238927:Homo sapiens mR; cD DKFZp434H1	3.43
415388	AF018081	Hs.78409	(locuslink)NM_030582:Homo sapiens collag	3.43
432210	AI567421	Hs.273330	Hs.273330:agrin	3.43
418177	N44967	Hs.351554	Hs.351554:Homo sapiens cD FLJ32092 fs,	3.42
414888	AL039185	Hs.77558	Hs.77558:thyroid hormone receptor intera	3.42
452445	AB002438	Hs.29596	Hs.29596:Homo sapiens mR from chromosome	3.41
414803	X03100	Hs.914	Hs.914:major histocompatibility complex,	3.41
419201	M22324	Hs.1239	NM_001150:Homo sapiens etanlyl (membrane)	3.41
445139	AB037848	Hs.12365	Hs.12365:syptotagmin XIII	3.41
435021	AA922192	Hs.73962	Hs.73962:EphA7	3.41
417259	AW903838	Hs.81800	Hs.81800:chondroitin sulfate proteoglyca	3.40
439737	AI751438	Hs.41271	Hs.41271:Homo sapiens mR full length ins	3.39
410636	AA088177	Hs.172870	Hs.172870:KIAA1913 protein	3.39
431590	AB037799	Hs.263395	Hs.263395:soma domain, transmembrane dom	3.38
415000	AW025529	Hs.239812	Hs.239812:serologically defined breast c	3.38
416700	AW498958	Hs.343475	NM_001909:Homo sapiens cathepsin D (lyso	3.36
440516	S42303	Hs.161	NM_001792:Homo sapiens cadherin 2, type	3.35
423720	AL044191	Hs.23388	Hs.23388:hypothetical protein DKFZp434F0	3.32
421902	BE392717		BE392717:601307571F1 NIH_MGC_44 Homo sap	3.32
409220	BE243323	Hs.51233	Hs.51233:tumor necrosis factor receptor	3.32
421502	AF111856	Hs.105039	NM_006424:Homo sapiens solute carrier fa	3.32
416729	U46165	Hs.1027	NM_004165:Homo sapiens Ras-related assoc	3.30
430302	AL137502	Hs.238679	Hs.238679:Rag D protein	3.30
445084	H38914	Hs.250848	Hs.250848:Homo sapiens cD FLJ14761 fs,	3.29
406825	AI982529	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	3.29
446272	BE268912	Hs.14601	NM_005335:Homo sapiens hematopoietic cel	3.28
437145	AF007216	Hs.5462	NM_003759:Homo sapiens solute carrier fa	3.27
444071	AI627808	Hs.110524	Hs.110524:ESTs	3.27
414662	AL036058	Hs.76807	Hs.76807:major histocompatibility comple	3.27
436576	AI458213	Hs.77542	Hs.77542:ESTs, Weakly similar to S26650	3.26
424675	NM_005512	Hs.151641	NM_005512:Homo sapiens glycoprotein A re	3.25
437897	AA770561	Hs.146170	Hs.146170:hypothetical protein FLJ22965	3.25
449703	H61001	Hs.171802	Hs.171802:Homo sapiens, clone IMAGE:3956	3.25
414788	X78342	Hs.77313	NM_003674:Homo sapiens cyclin-dependent	3.25
414249	AI797994	Hs.279929	Hs.279929:gp25L2 protein	3.24

430396	D49742	Hs.241363	NM_004132:Homo sapiens hyaluron binding	3.23
424456	AA341017	Hs.25549	Hs.25549:hypothetical protein FLJ20898	3.23
452303	R27257	Hs.57734	Hs.57734:G protein-coupled receptor like	3.22
425390	AI092634	Hs.156114	NM_004648:Homo sapiens protein tyrosine	3.21
416033	NM_012201	Hs.78979	NM_012201:Homo sapiens golgi apparatus p	3.19
450931	N25156	Hs.25648	Hs.25648:tumor necrosis factor receptor	3.19
426065	AI634048	Hs.157313	Hs.157313:ESTs	3.18
422616	BE300330	Hs.118725	NM_012248:Homo sapiens selenophosphate s	3.18
439318	AW837046	Hs.6527	Hs.6527:G protein-coupled receptor 56	3.17
427640	AF058293	Hs.180015	NM_001355:Homo sapiens D-dopachrome taut	3.17
409936	AK001691	Hs.57655	Hs.57655:dudulin 2	3.16
436001	AW903849	Hs.173840	Hs.173840:similar to endothelial cell-se	3.16
451154	AA015879	Hs.33536	Hs.33536:ESTs	3.16
420256	U84722	Hs.76206	NM_001795:Homo sapiens cadherin 5, type	3.16
407584	W25945	Hs.8173	Hs.8173:hypothetical protein FLJ10803	3.15
428593	AW207440	Hs.185973	NM_003676:Homo sapiens degenerative sper	3.15
410026	AI912061	Hs.55016	Hs.55016:EPS8-related protein 2	3.15
445333	BE537641	Hs.44278	Hs.44278:RAB17, member RAS oncogene fami	3.14
448143	AF039704	Hs.20478	NM_000391:Homo sapiens ceroid-lipofuscin	3.14
423007	AA320134	Hs.196029	Hs.196029:Homo sapiens mR for KIAA1657 p	3.14
416511	NM_006762	Hs.79356	NM_006762:Homo sapiens Lysosomal-associa	3.14
439237	AW408158	Hs.318893	Hs.318893:ESTs, Weakly similar to Z195_H	3.13
446899	NM_005397	Hs.16426	NM_005397:Homo sapiens podocalyxin-like	3.13
413916	N49813	Hs.75615	NM_000483:Homo sapiens apolipoprotein C-	3.13
434398	AA121098	Hs.3838	NM_006622:Homo sapiens serum-inducible k	3.12
441283	AA927670	Hs.131704	Hs.131704:ESTs	3.12
418945	BE246782	Hs.89499	NM_000698:Homo sapiens arachidate 5-lipo	3.12
418458	AA332941	Hs.85226	NM_000235:Homo sapiens lipase A, lysosom	3.12
408989	AW361666	Hs.49500	Hs.49500:KIAA0748 protein	3.11
436905	H95990	Hs.181244	Hs.181244:major histocompatibility compl	3.11
411089	AA456454	Hs.355702	Hs.355702:ESTs, Weakly similar to AC0048	3.11
432990	AL036071	Hs.279899	NM_003820:Homo sapiens tumor necrosis fa	3.11
425009	X58288	Hs.154151	NM_002845:Homo sapiens protein tyrosine	3.10
443601	AI078554	Hs.42658	Hs.42658:Homo sapiens cD FLJ30167 fis, c	3.10
430603	AA148164	Hs.247280	Hs.247280:chromosome 20 open reading fra	3.10
413672	BE156536	Hs.353632	Hs.353632:ESTs, Moderately similar to hy	3.09
407786	AA687538	Hs.38972	NM_005727:Homo sapiens tetraspan 1 (TSPA	3.09
414586	AA306160	Hs.16488	NM_002298:Homo sapiens lymphocyte cyto	3.08
423712	W45802	Hs.81988	Hs.81988:disabled homolog 2, mitogen-res	3.08
436552	AJ245820	Hs.6314	NM_012410:Homo sapiens type I transmembr	3.08
448364	T08958	Hs.297214	Hs.297214:HSPC141 protein	3.06
426437	BE076537	Hs.169895	NM_004223:Homo sapiens ubiquitin-conjuga	3.06
437679	NM_014214	Hs.5753	NM_014214:Homo sapiens inositol(myo)-1(o	3.06
422262	AL022315	Hs.113987	NM_006498:Homo sapiens lectin, galactosi	3.06
410480	R97457	Hs.63984	NM_001257:Homo sapiens cadherin 13, H-ca	3.05
435818	AA700553	Hs.368614	Hs.368614:ESTs	3.05
418883	BE387036	Hs.1211	NM_001611:Homo sapiens acid phosphatase	3.05
453613	F06838	Hs.374476	Hs.374476:ESTs	3.05
408051	AI623351	Hs.172148	Hs.172148:ESTs	3.05
432278	AL137506	Hs.274256	Hs.274256:hypothetical protein FLJ23563	3.04
407949	W21874	Hs.247057	Hs.247057:ESTs, Weakly similar to 210926	3.04
418090	U57059	Hs.83429	NM_003810:Homo sapiens tumor necrosis fa	3.04
433165	AA578904	Hs.292437	Hs.292437:ESTs	3.03
425809	AA370362	Hs.57958	Hs.57958:EGF-TM7-latrophilin-related pro	3.03
443884	N20617	Hs.194397	Hs.194397:ESTs, Moderately similar to 22	3.03
447831	AA33293	Hs.164115	Hs.164115:ESTs	3.02
413278	BE563085	Hs.833	NM_005101:Homo sapiens interferon-stimul	3.01
418870	AF147204	Hs.89414	Hs.89414:chemokine (C-X-C motif), recept	3.00
456376	AA663904	Hs.89862	Hs.89862:TNFRSF1A-associated via death d	3.00
439738	BE246502	Hs.8598	Hs.8598:sama domain, immunoglobulin doma	3.00
444416	AW288085	Hs.11156	NM_016494:Homo sapiens hypothetical prot	3.00
406656	M16714	Hs.89643	Hs.89643:transketolase (Wernicke-Korsako	3.00
405826	AW516005	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	2.99
418707	U97502	Hs.87497	Hs.87497:butyrophilin, subfamily 3, memb	2.99
421742	AW970004	Hs.107528	NM_016108:Homo sapiens androgen induced	2.99
406824	AW515961	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	2.99
435605	AF151815	Hs.4973	NM_015680:Homo sapiens hypothetical prot	2.98
410491	AA465131	Hs.84001	Hs.84001:Homo sapiens clone 25218 mR seq	2.98
427648	AJ376722	Hs.180062	NM_004159:Homo sapiens proteasome (proso	2.98
411125	AA151647	Hs.68877	NM_000101:Homo sapiens cytochrome b-245,	2.98
435550	AI224456	Hs.324507	Hs.324507:hypothetical protein FLJ20985	2.98
429373	NM_014694	Hs.200594	NM_014694:Homo sapiens KIAA0605 gene pro	2.98
445701	AF055581	Hs.13131	NM_005475:Homo sapiens lymphocyte adapto	2.97
414649	AI672727	Hs.76753	NM_000118:Homo sapiens endoglin (Oster-R	2.97
444207	AI565004	Hs.374415	Hs.374415:ESTs	2.97
423225	AA852604	Hs.125359	NM_006288:Homo sapiens Thy-1 cell surfac	2.97
407792	AI077715	Hs.39384	NM_014344:Homo sapiens four jointed box	2.97
445707	AI248720	Hs.114390	Hs.114390:ESTs	2.96
452888	AW955454	Hs.30942	NM_004093:Homo sapiens ephrin-B2 (EFNB2)	2.96
418478	U38945	Hs.1174	Hs.1174:cyclin-dependent kinase inhibitor	2.95
411441	AL042355	Hs.70202	Hs.70202:WD repeat domain 10	2.95
443426	AF098158	Hs.9329	Hs.9329:chromosome 20 open reading frame	2.94
450876	AF189062	Hs.285976	Hs.285976:LAG1 longevity assurance homol	2.94

426359	AA376409	Hs.10862	Hs.10862:Homo sapiens cD: FLJ23313 fs,	2.94
425421	L11669	Hs.157145	NM_001120:Homo sapiens tetracycline tran	2.93
449879	H03573	Hs.287830	Hs.287830:Homo sapiens mR: cD DKFZp434E1	2.93
454075	R43826	Hs.16313	Hs.16313:Kruppel-like zinc finger protei	2.93
421595	AB014520	Hs.301685	Hs.301685:KIAA0620 protein	2.93
457949	W69171	Hs.334814	Hs.334814:hypothetical protein FLJ14868	2.92
443987	AW163123	Hs.10071	NM_016551:Homo sapiens seven transmembra	2.92
430259	BE550182	Hs.375142	Hs.375142:RafGEF-like protein 3, mouse h	2.92
415906	AJ751357	Hs.288741	Hs.288741:Homo sapiens cD: FLJ22256 fs,	2.91
429762	AI346255	Hs.216354	NM_006913:Homo sapiens ring finger prote	2.91
451527	AF022813	Hs.26518	NM_003271:Homo sapiens transmembrane 4 s	2.91
425356	BE244879	Hs.155939	NM_005541:Homo sapiens inositol polyphos	2.91
427080	AW068287	Hs.301175	NM_002872:Homo sapiens ras-related C3 bo	2.91
426432	AF001601	Hs.169857	NM_000305:Homo sapiens paraoxase 2 (PON2	2.90
431476	BE612705	Hs.256697	Hs.256697:histidine triad nucleotide bin	2.89
406659	AA663985	Hs.277477	Hs.277477:major histocompatibility compl	2.89
451144	AW956103	Hs.61712	Hs.61712:Homo sapiens cD FLJ31548 fs, c	2.89
456362	AW973003	Hs.179909	Hs.179909:nuclear receptor coactivator 6	2.88
426440	BE382756	Hs.169902	NM_006516:Homo sapiens solute carrier fa	2.88
456974	M12529	Hs.169401	NM_000041:Homo sapiens apolipoprotein E	2.88
418174	L20688	Hs.83656	Hs.83656:Rho GDP dissociation inhibitor	2.88
445055	AJ815981	Hs.12909	Hs.12909:mucopolip 1	2.88
423184	NM_004428	Hs.1624	NM_004428:Homo sapiens ephrin-A1 (EF1),	2.87
427700	AA262294	Hs.180383	NM_001946:Homo sapiens dual specificity	2.87
410668	BE379794	Hs.159651	NM_016629:Homo sapiens hypothetical prot	2.87
444143	AW747996	Hs.160999	Hs.160999:ESTs, Weakly similar to I7885	2.87
407151	H25838	Hs.301527	Hs.301527:ESTs, Moderately similar to un	2.86
449349	AJ825386	Hs.352579	Hs.352579:Homo sapiens, chromosome 20 op	2.86
436997	AA741151	Hs.137323	Hs.137323:ESTs	2.86
446143	BE245342	Hs.306079	NM_013336:Homo sapiens protein transport	2.86
417355	D13168	Hs.82002	Hs.82002:endothelin receptor type B	2.86
431685	AW296135	Hs.267659	NM_006113:Homo sapiens vav 3 oncogene (V	2.86
408877	AA479033	Hs.130315	Hs.130315:ESTs	2.85
429615	AF258627	Hs.211562	NM_005502:Homo sapiens ATP-binding casse	2.85
412014	AI620650	Hs.43761	Hs.43761:gap junction protein, alpha 7,	2.84
436749	AA584890	Hs.5302	NM_006149:Homo sapiens lectin, galactosi	2.84
419625	U91616	Hs.182885	NM_004556:Homo sapiens nuclear factor of	2.84
439941	AI392640	Hs.18272	Hs.18272:solute carrier family 38, membe	2.84
436496	AA281959	Hs.5210	NM_004877:Homo sapiens glia maturation f	2.84
421100	AI096988	Hs.111554	NM_005737:Homo sapiens ADP-ribosylation	2.83
439730	AF035292	Hs.6654	Hs.6654:KIAA0657 protein	2.83
447217	BE465754	Hs.17778	NM_003872:Homo sapiens neuropilin 2 (NRP	2.83
428343	AL043021	Hs.12705	Hs.12705:similar to HYPOTHETICAL 43.1 KO	2.82
440524	R71264	Hs.16798	Hs.16798:Homo sapiens mR: cD DKFZp564O24	2.82
415523	ALD42003	Hs.296847	NM_003119:Homo sapiens spastic paraplegi	2.81
439668	AJ091277	Hs.302634	Hs.302634:frizzled homolog 8 (Drosophila	2.81
414570	Y00285	Hs.76473	NM_000876:Homo sapiens insulin-like grow	2.80
426535	AU077012	Hs.288582	NM_006287:Homo sapiens tissue factor pat	2.80
409649	AA159216	Hs.55505	Hs.55505:hypothetical protein FLJ20442	2.80
406655	M21533	Hs.277477	Hs.277477:major histocompatibility compl	2.79
415323	BE269352	Hs.949	NM_000433:Homo sapiens neutrophil cytosol	2.79
443195	BE148235	Hs.193063	Hs.193063:Homo sapiens cD FLJ14201 fs,	2.78
451356	AA748418	Hs.164577	Hs.164577:ESTs	2.78
450708	AA376654	Hs.350065	Hs.350065:Homo sapiens cD FLJ30634 fs,	2.78
433681	AJ004377	Hs.200360	Hs.200360:Homo sapiens cD FLJ13027 fs,	2.77
442599	AF078037	Hs.324051	NM_006663:Homo sapiens RelA-associated I	2.76
414509	AW161311	Hs.76294	NM_001780:Homo sapiens CD63 antigen (mel	2.76
431394	AK000692	Hs.252351	Hs.252351:HERV-H LTR-associating 2	2.76
417331	AW411297	Hs.81972	Hs.81972:SHC (Src homology 2 domain cont	2.76
415995	NM_004573	Hs.335888	NM_004573:Homo sapiens phosphatase C,	2.75
414911	NM_000107	Hs.77602	NM_000107:Homo sapiens damage-specific D	2.75
425976	C75094	Hs.334514	Hs.334514:chromosome 6 open reading fram	2.75
407893	BE408359	Hs.43621	Hs.43621:hypothetical protein M8C3205	2.75
407903	AJ287341	Hs.154029	Hs.154029:bHLH factor Hes4	2.75
416062	AA724811	Hs.334791	Hs.334791:similar to neuropilin tetraspanin	2.75
428494	AA233439	Hs.184634	Hs.184634:hypothetical protein FLJ20005	2.75
421506	BE302796	Hs.105097	NM_003258:Homo sapiens thymidine kisa 1,	2.74
427581	NM_014788	Hs.179703	NM_014788:Homo sapiens tripartite motif-	2.74
424527	AW138558	Hs.334873	Hs.334873:carboxypeptidase M	2.74
439578	AW263124	Hs.350547	Hs.350547:nuclear receptor co-repressor/	2.74
425188	AK002052	Hs.155071	Hs.155071:chromosome 20 open reading fra	2.74
428013	AF151020	Hs.181444	NM_016456:Homo sapiens hypothetical prot	2.73
439333	AW384710	Hs.132986	Hs.132986:Homo sapiens cD FLJ31588 fs,	2.73
450935	BE514743	Hs.355753	NM_005851:Homo sapiens tumor suppressor	2.73
421532	AW138207	Hs.146170	Hs.146170:hypothetical protein FLJ22969	2.73
440502	AJ824113	Hs.78281	Hs.78281:regulator of G-protein sigling	2.73
444981	AW855398	Hs.12210	Hs.12210:tumor endothelial marker 6	2.72
439219	N33883	Hs.41322	Hs.41322:ESTs	2.72
416847	L43821	Hs.80261	NM_006403:Homo sapiens enhancer of filam	2.72
433179	AW362945	Hs.162459	Hs.162459:ESTs	2.72
424528	AW073971	Hs.238954	Hs.238954:ESTs, Weakly similar to putati	2.71
411213	AA676939	Hs.69285	NM_003873:Homo sapiens neuropilin 1 (NRP	2.70
433012	NM_004045	Hs.279910	NM_004045:Homo sapiens ATX1 antioxidant	2.70

5	425345	AU077297	Hs.155894	NM_002827:Homo sapiens protein tyrosine	2.69
	428923	BE047698	Hs.188785	Hs.188785:ESTs	2.69
	427923	AW274357	Hs.301406	Hs.301406:hypothetical protein PP3501	2.69
	446644	NM_003272	Hs.15791	NM_003272:Homo sapiens transmembrane 7 s	2.69
	421743	T35958	Hs.107614	Hs.107614:DKFZP564I1171 protein	2.68
	416207	NM_014745	Hs.79077	NM_014745:Homo sapiens KIAA0233 gene pro	2.68
	420372	AW960049	Hs.293660	Hs.293660:gene overexpressed in astrocyt	2.68
	420542	NM_000505	Hs.1321	NM_000505:Homo sapiens coagulation facto	2.67
10	425069	AA687465	Hs.298184	Hs.298184:potassium voltage-gated channe	2.67
	418558	AW082266	Hs.88131	NM_003824:Homo sapiens Fas (TNFRSF6)-ass	2.67
	426251	M24283	Hs.168383	NM_000201:Homo sapiens intercellular adh	2.66
	406701	AA780613	Hs.62954	Hs.62954:tenilin, heavy polypeptide 1	2.66
	431681	AK000378	Hs.267566	Hs.267566:hypothetical protein FLJ20371	2.66
	412833	AW960547	Hs.298262	Hs.298262:ribosomal protein S18	2.66
15	433101	AW572317	Hs.12082	Hs.12082:TIGA1	2.66
	414774	X02419	Hs.77274	NM_002658:Homo sapiens plasminogen activ	2.66
	427868	AI360119	Hs.181013	NM_002629:Homo sapiens phosphoglycerate	2.66
	413929	BE501689	Hs.75617	Hs.75617:collagen, type IV, alpha 2	2.66
20	424762	AL119442	Hs.183684	Hs.183684:eukaryotic translation Initiat	2.66
	422048	NM_012445	Hs.288126	NM_012445:Homo sapiens spondin 2, extrac	2.65
	431350	AI192528	Hs.164537	Hs.164537:ESTs	2.65
	450184	W31096	Hs.237617	Hs.237617:dipeptidylpeptidase 9	2.65
	419285	D31887	Hs.89868	Hs.89868:KIAA0062 protein	2.65
25	414217	AI309298	Hs.279898	Hs.279898:Homo sapiens cD: FLJ23185 fis,	2.64
	451253	H48299	Hs.26126	NM_006984:Homo sapiens claudin 10 (CLDN1	2.64
	435905	AW997484	Hs.5003	Hs.5003:SLIT-ROBO Rho GTPase-activating	2.64
	432581	AU076465	Hs.278441	NM_014634:Homo sapiens KIAA0015 gene pro	2.63
	415782	AA169345	Hs.123177	Hs.123177:hypothetical protein BC011406	2.63
30	430223	NM_002514	Hs.235935	NM_002514:Homo sapiens nephroblastoma ov	2.63
	417526	AA568906	Hs.82240	NM_004177:Homo sapiens syntaxin 3A (STX3	2.63
	409956	AW103364	Hs.727	NM_002192:Homo sapiens inhibin, beta A (	2.63
	449843	R85337	Hs.24030	NM_001860:Homo sapiens solute carrier fa	2.62
	417389	BE260964	Hs.82045	NM_002391:Homo sapiens midline (neurite	2.62
35	446312	BE087853	Hs.171802	Hs.171802:Homo sapiens, clone IMAGE:3956	2.62
	435099	AC004770	Hs.4756	Hs.4756:flap structure-specific endonuci	2.62
	417920	S47833	Hs.82927	NM_004037:Homo sapiens adenosine monopho	2.62
	435702	AI033647	Hs.121001	Hs.121001:Homo sapiens, clone MGC:45521	2.62
40	422959	AV647015	Hs.349256	Hs.349256:paired immunoglobulin-like rec	2.62
	419938	AU076772	Hs.1279	NM_001733:Homo sapiens complement compon	2.62
	450954	AI904740	Hs.25691	NM_005856:Homo sapiens receptor (calcito	2.61
	421753	BE314828	Hs.107911	Hs.107911:ATP-binding cassette, sub-fami	2.61
	443577	AI078033	Hs.177170	Hs.177170:ESTs, Weakly similar to ALU8_H	2.61
	453886	R68282	Hs.20247	Hs.20247:ESTs	2.61
45	421883	X55079	Hs.1437	NM_000152:Homo sapiens glucosidase, alph	2.60
	440457	BE387593	Hs.21321	Hs.21321:granule cell differentiation pr	2.60
	410295	AA741357	Hs.356624	Hs.356624:ESTs	2.59
	420679	X57152	Hs.99853	NM_001436:Homo sapiens fibrillarin (FBL)	2.59
50	451558	NM_001089	Hs.26630	NM_001089:Homo sapiens ATP-binding casse	2.59
	444672	Z95636	Hs.11669	Hs.11669:lamnin, alpha 5	2.59
	408669	AI493591	Hs.78146	Hs.78146:platelet/endothelial cell adhes	2.59
	426194	T50872	Hs.2001	Hs.2001:thromboxane A synthase 1 (plate	2.59
	421814	L12350	Hs.108623	NM_003247:Homo sapiens thrombospondin 2	2.59
55	456371	S76825	Hs.89695	Hs.89695:insulin receptor	2.59
	429098	AF030249	Hs.196176	NM_001398:Homo sapiens enoyl Coenzyme A	2.59
	414443	AU077268	Hs.76144	NM_002609:Homo sapiens platelet-derived	2.59
	428484	AF104032	Hs.184601	NM_003486:Homo sapiens solute carrier fa	2.59
	453309	AI791809	Hs.32949	NM_005218:Homo sapiens defensin, beta 1	2.59
	412887	AU076861	Hs.74637	NM_003217:Homo sapiens testis enhanced g	2.58
60	432827	Z68128	Hs.3109	Hs.3109:Rho GTPase activating protein 4	2.58
	412669	AW880841	Hs.96908	NM_006034:Homo sapiens p53-induced prote	2.58
	412115	AK001763	Hs.73239	Hs.73239:hypothetical protein FLJ10901	2.58
	452866	R26969	Hs.268016	Hs.268016:Homo sapiens cD: FLJ21243 fis,	2.58
	435129	AI381659	Hs.267086	Hs.267086:ESTs	2.57
65	424482	BE268621	Hs.149155	NM_003374:Homo sapiens voltage-dependent	2.57
	410494	M36564	Hs.64016	NM_000313:Homo sapiens protein S (alpha)	2.56
	433895	AI287912	Hs.3628	NM_004834:Homo sapiens mitogen-activated	2.56
	442566	R37337	Hs.12111	Hs.12111:ESTs	2.56
	417640	D30857	Hs.82353	NM_006404:Homo sapiens protein C recepto	2.56
70	442622	NM_000435	Hs.8546	NM_000435:Homo sapiens Notch homolog 3 (	2.56
	430346	AK000331	Hs.297641	Hs.297641:retinoblastoma-associated fact	2.55
	419344	U94905	Hs.277445	Hs.277445:diacylglycerol kinase, zeta (104	2.55
	426500	NM_014638	Hs.170156	NM_014638:Homo sapiens KIAA0450 gene pro	2.55
	408048	NM_007203	Hs.42322	NM_007203:Homo sapiens A kinase (PRKA) anc	2.55
75	450700	AW732799	Hs.25348	NM_005860:Homo sapiens farnesyltransferase-like	2.54
	417018	M16038	Hs.80687	NM_002350:Homo sapiens v-src-1 Yamaguchi	2.54
	419378	R24922	Hs.90078	Hs.90078:nucleotide-sugar transporter ci	2.54
	422451	AA310753	Hs.42491	Hs.42491:ESTs, Moderately similar to hyp	2.53
	435906	AI686379	Hs.110796	Hs.110796:SAR1 protein	2.53
80	400231				2.53
	417849	AW291587	Hs.82733	NM_007361:Homo sapiens nidogen 2 (NID2),	2.53
	427380	NM_005534	Hs.177559	NM_005534:Homo sapiens interferon gamma	2.52
	428385	AF112213	Hs.184062	Hs.184062:chromosome 20 open reading fra	2.52
	438000	AI825880	Hs.5985	Hs.5985:non-kinase Cdc42 effector protein	2.52

448719	AA033627	Hs.21858	Hs.21858:serine (or cysteine) protease i	2.52
422395	W21872	Hs.7907	Hs.7907:1-fucose kase	2.52
420787	AA564248	Hs.351292	Hs.351292:Homo sapiens cD FLJ32605 fs,	2.51
430590	AW383947	Hs.246381	NM_001251:Homo sapiens CD68 antigen (CD6	2.51
447026	BE313144	Hs.324844	Hs.324844:hypothetical protein IMAGE3455	2.51
439223	AW238299	Hs.250618	Hs.250618:UL16 binding protein 2	2.50
435151	AA348482	Hs.4788	Hs.4788:nicastatin	2.50
448202	AB002292	Hs.20695	NM_014829:Homo sapiens Rho guanine nucle	2.50
449943	AF104266	Hs.24212	Hs.24212:tatrophilin	2.50
425743	BE396495	Hs.159428	Hs.159428:BCL2-associated X protein	2.50
444681	AJ243937	Hs.288316	Hs.288316:chromosome 6 open reading fram	2.50
421643	BE281170	Hs.106357	NM_007126:Homo sapiens valosin-containing	2.50
426865	D63476	Hs.172813	NM_003899:Homo sapiens Rho guanine nucle	2.50
432306	Y18207	Hs.303090	NM_005398:Homo sapiens protein phosphata	2.49
421846	AA017707	Hs.1432	NM_002743:Homo sapiens protein kase C su	2.49
421905	AI660247	Hs.32699	Hs.32699:Homo sapiens, Similar to RIKEN	2.49
419493	AF001212	Hs.90744	NM_002815:Homo sapiens proteasome (proso	2.49
422530	AW972300	Hs.118110	NM_004335:Homo sapiens bone marrow strom	2.48
442821	BE391929	Hs.8752	NM_014255:Homo sapiens transmembrane pro	2.48
416919	T97839	Hs.80464	NM_006402:Homo sapiens hepatitis B virus	2.48
443105	X96753	Hs.9004	NM_001897:Homo sapiens chondrotin sulfat	2.48
430040	AW503115	Hs.227823	NM_014287:Homo sapiens p45 protein (PM5)	2.48
428028	U52112	Hs.182018	NM_001569:Homo sapiens Interleukin-1 rec	2.47
424307	AW293399	Hs.356377	Hs.356377:Homo sapiens, clone IMAGE:3633	2.46
434511	R28982	Hs.18106	Hs.18106:ESTs, Weakly similar to T06291	2.46
454390	AB020713	Hs.56966	Hs.56966:KIAA0906 protein	2.46
417785	X59812	Hs.82568	NM_000784:Homo sapiens cytochrome P450,	2.46
424873	AA345051	Hs.294092	Hs.294092:Homo sapiens mR full length in	2.46
422003	AA361760	Hs.296326	Hs.296326:ESTs, Weakly similar to A33533	2.46
432126	AA655239	Hs.37196	Hs.37196:putative G protein coupled rece	2.46
445937	AI452943	Hs.321231	NM_003779:Homo sapiens UDP-Galactose 4-epi	2.46
409354	N68188	Hs.159472	Hs.159472:Homo sapiens cD: FLJ22224 fs,	2.46
401179				2.46
418151	AA864238	Hs.83583	NM_005731:Homo sapiens actin related pro	2.45
422648	D86983	Hs.118893	Hs.118893:Melanoma associated gene	2.45
427759	BE245578	Hs.2200	NM_005041:Homo sapiens perforin 1 (proto	2.45
431222	X56777	Hs.273790	NM_007155:Homo sapiens zo pellucida glyc	2.45
411529	AA430348	Hs.317596	Hs.317596:Homo sapiens cD FLJ12927 fs,	2.45
426825	AL133415	Hs.297753	NM_003380:Homo sapiens vimentin (VIM), m	2.45
422242	AJ251760	Hs.273385	NM_016592:Homo sapiens GS complex locus	2.45
408105	AW152207	Hs.270977	Hs.270977:ESTs	2.44
426410	BE298446	Hs.305890	Hs.305890:BCL2-like 1	2.44
421064	AI245432	Hs.101382	NM_006291:Homo sapiens tumor necrosis fa	2.44
428157	AJ738719	Hs.198427	NM_000189:Homo sapiens hexokinase 2 (HK2),	2.44
424398	BE397787	Hs.146393	NM_014685:Homo sapiens homocysteine-indu	2.44
424825	AF207069	Hs.153357	NM_001084:Homo sapiens procollagen-lysin	2.44
426031	AA295251	Hs.166066	Hs.166066:cisplatin resistance associate	2.43
409817	BE295464	Hs.56607	Hs.56607:Williams-Beuren syndrome chromo	2.43
429359	W00482	Hs.2399	NM_004995:Homo sapiens matrix metallopro	2.43
426761	AJ015709	Hs.172089	Hs.172089:pro-oncosis receptor inducing	2.43
429332	AF030403	Hs.199263	NM_013233:Homo sapiens serine threonine	2.43
425923	NM_005026	Hs.162808	NM_005026:Homo sapiens phosphoinositide	2.43
432211	BE274530	Hs.273333	Hs.273333:hypothetical protein FLJ10986	2.43
433339	AF019226	Hs.8036	Hs.8036:RAB3D, member RAS oncogene famil	2.42
420539	AA282735	Hs.44004	Hs.44004:AD031 protein	2.42
413243	AA769266	Hs.193657	Hs.193657:ESTs	2.42
435029	AF167706	Hs.19280	Hs.19280:cysteine-rich motor neuron 1	2.42
422374	AW732869	Hs.1519	Hs.1519:protein kase, cAMP-dependent, re	2.42
444501	AW247624	Hs.11342	NM_004148:Homo sapiens ninjurin 1 (NINJ1	2.42
414919	AW087337	Hs.194461	Hs.194461:ESTs	2.42
419355	AA428520	Hs.90061	NM_006667:Homo sapiens progesterone rece	2.42
436042	AF284422	Hs.119178	Hs.119178:cation-chloride cotransporter-	2.42
418245	AA088767	Hs.83883	Hs.83883:transmembrane, prostate androge	2.42
444215	AB033075	Hs.10669	Hs.10669:development and differentiation	2.41
408683	R58665	Hs.46847	NM_016614:Homo sapiens TRAF and TNF rece	2.41
423701	AA328856	Hs.143022	Hs.143022:ESTs	2.41
441783	BE313412	Hs.7961	Hs.7961:Homo sapiens clone 25012 mR sequ	2.41
428072	BE258602	Hs.182366	NM_016292:Homo sapiens heat shock protei	2.41
434599	AB002313	Hs.3989	Hs.3989:plexin B2	2.40
442351	W52642	Hs.8261	Hs.8261:SPRY domain-containing SOCS box	2.40
407894	AJ278313	Hs.41143	Hs.41143:phospholipase C, beta 1 (phosph	2.40
453449	W16752	Hs.32981	Hs.32981:sema domain, immunoglobulin dom	2.40
408688	AI634522	Hs.152925	Hs.152925:KIAA1268 protein	2.40
422448	AW372922	Hs.116774	Hs.116774:Integrin, alpha 1	2.39
416269	AA177138	Hs.161671	Hs.161671:ESTs	2.39
452679	Z42387	Hs.83883	Hs.83883:transmembrane, prostate androge	2.38
432981	NM_002733	Hs.3136	NM_002733:Homo sapiens protein kase, AMP	2.38
419846	NM_015977	Hs.285681	Hs.285681:Williams Beuren syndrome chrom	2.38
422110	AI376738	Hs.111779	Hs.111779:secreted protein, acidic, cyst	2.38
413092	AA126856	Hs.118665	Hs.118665:ESTs	2.38
433969	AW207279	Hs.271786	Hs.271786:ESTs, Weakly similar to PC4395	2.37
451267	AI033894	Hs.117865	Hs.117865:solute carrier family 17 (anion	2.37
447526	AL048753	Hs.303649	NM_002982:Homo sapiens small inducible c	2.37

5	441623	AA315805	Hs.348710	Hs.348710: Homo sapiens, clone IMAGE:4242	2.37
	420255	NM_007289	Hs.1298	NM_007289: Homo sapiens membrane metallo-	2.37
	409274	NM_003930	Hs.52644	NM_003930: Homo sapiens src family associ	2.36
	422801	AF125672	Hs.287994	Hs.287994: nuclear receptor co-repressor	2.36
	407887	AA579668	Hs.41072	Hs.41072: serine (or cysteine) protease i	2.36
	408212	AA297567	Hs.43728	NM_015696: Homo sapiens weakly similar to	2.36
	430478	NM_014349	Hs.241535	NM_014349: Homo sapiens apolipoprotein L	2.36
	405102				2.35
10	423583	AL122055	Hs.129836	Hs.129836: KIAA1028 protein	2.35
	426125	X87241	Hs.166994	NM_005245: Homo sapiens FAT tumor suppres	2.35
	425204	NM_002436	Hs.1861	NM_002436: Homo sapiens membrane protein,	2.35
	420676	AJ434780	Hs.4248	Hs.4248: Homo sapiens PP3781 mR, complete	2.35
	421079	AW404994	Hs.101695	Hs.101695: NCK adaptor protein 2	2.35
	410039	AF207989	Hs.58014	Hs.58014: G protein-coupled receptor, fam	2.34
15	412958	BE391579	Hs.75087	NM_006712: Homo sapiens FAST kinase (FASTK)	2.34
	430363	M28713	Hs.274464	NM_000398: Homo sapiens diaphorase (DH) (	2.34
	425397	J04088	Hs.156346	NM_001067: Homo sapiens topoisomerase (D)	2.34
	451035	AU076785	Hs.430	NM_002670: Homo sapiens plastin 1 (fl iso)	2.34
20	449027	AJ271216	Hs.22880	Hs.22880: dipeptidylpeptidase III	2.34
	429457	BE243065	Hs.202955	Hs.202955: hypothetical protein FLJ20507	2.34
	417709	D87344	Hs.82426	NM_014734: Homo sapiens KIAA0247 gene pro	2.34
	412805	AW954569	Hs.278675	Hs.278675: bromodomain-containing 4	2.34
	427647	W19744	Hs.180059	Hs.180059: Homo sapiens cD FLJ31360 fis,	2.34
25	430702	U56979	Hs.278568	NM_000186: Homo sapiens H factor 1 (compl	2.33
	456804	AJ421645	Hs.139851	NM_001233: Homo sapiens caveolin 2 (CAV2)	2.33
	453648	W21493	Hs.28329	Hs.28329: protein phosphatase 1, regulato	2.33
	450812	AB002360	Hs.25515	Hs.25515: MCF.2 cell line derived transfo	2.33
	402575				2.33
30	424670	W61215	Hs.116651	NM_005797: Homo sapiens epithelial V-like	2.32
	452960	AK001335	Hs.31137	NM_006504: Homo sapiens protein tyrosine	2.32
	442968	AK000606	Hs.8868	NM_004871: Homo sapiens golgi SP receptor	2.32
	410639	BE269047	Hs.65234	Hs.65234: DEAD/H (Asp-Glu-Ala-Asp/His) bo	2.32
	415169	W42913	Hs.78089	NM_004231: Homo sapiens ATPase, H+-transp	2.32
35	450160	BE048099	Hs.183738	Hs.183738: FERM, RhoGEF (ARHGEF) and plec	2.32
	407223	H96850		H96850: yw03b12.s1 Soares melanocyte 2NbH	2.32
	426780	BE242284	Hs.172199	NM_001114: Homo sapiens adenylate cyclase	2.32
	434987	AW975114	Hs.371677	Hs.371677: ESTs	2.32
	416354	NM_000633	Hs.79241	NM_000633: Homo sapiens B-cell CLL/lympho	2.31
40	453107	NM_016113	Hs.279746	NM_016113: Homo sapiens transient recepto	2.31
	422963	M79141	Hs.13234	Hs.13234: ESTs, Weakly similar to hypothe	2.31
	433618	AA602539	Hs.345494	Hs.345494: ESTs, Moderately similar to ZN	2.31
	438584	AA811347		AA811347: ob81h06.s1 NCL CGAP_GCB1 Homo s	2.31
	446126	AW085909	Hs.356618	Hs.356618: ESTs, Weakly similar to PC4259	2.31
45	408716	AI567839	Hs.151714	Hs.151714: peroxisomal proliferator-activ	2.30
	433230	AW136134	Hs.220277	Hs.220277: ESTs, Weakly similar to expres	2.30
	410168	AW834050	Hs.351432	Hs.351432: tensin	2.30
	446342	BE298665	Hs.14846	Hs.14846: Homo sapiens mR: cD OKFZp564D01	2.30
	418452	BE379749	Hs.85201	NM_005127: Homo sapiens C-type (calcium d	2.30
50	453175	NM_006834	Hs.32217	NM_006834: Homo sapiens RAB32, member RAS	2.29
	409012	AL117435	Hs.49725	Hs.49725: DKFZP434I216 protein	2.29
	452848	AJ417193	Hs.288912	Hs.288912: BBP-like protein 2	2.29
	418838	AW385224	Hs.35198	Hs.35198: ectonucleotide pyrophosphatase/	2.29
55	422562	AI962060	Hs.118397	NM_001129: Homo sapiens AE binding protei	2.28
	432828	AB042326	Hs.287402	Hs.287402: chondroitin 4-sulfotransferase	2.28
	412948	BE243313	Hs.334851	NM_006148: Homo sapiens LIM and SH3 prote	2.28
	426068	AF029778	Hs.166154	NM_002226: Homo sapiens jagged 2 (JAG2),	2.28
	456919	NM_003900	Hs.182248	NM_003900: Homo sapiens sequestosome 1 (S	2.28
	452806	AW014549	Hs.58373	Hs.58373: ESTs	2.28
60	453983	H94997	Hs.16450	Hs.16450: ESTs	2.28
	407736	N41744	Hs.349326	Hs.349326: Homo sapiens cD FLJ30677 fis,	2.28
	413211	AW967107	Hs.109274	Hs.109274: hypothetical protein MGCA365	2.28
	422051	AW327546	Hs.111024	Hs.111024: solute carrier family 25 (mito	2.27
	438438	AA257992	Hs.50651	Hs.50651: Janus kinase 1 (a protein tyrosin	2.27
65	436278	BE396290	Hs.5097	NM_004710: Homo sapiens synglycyrin 2 (SYN	2.27
	454080	AJ199711	Hs.576	NM_000147: Homo sapiens fucosidase, alpha	2.27
	426542	AF190746	Hs.170310	NM_017424: Homo sapiens cat eye syndrome	2.27
	417115	AW952792	Hs.334612	NM_003094: Homo sapiens small nuclear rib	2.27
	402901				2.26
70	412898	AI129903	Hs.74669	NM_006634: Homo sapiens vesicle-associate	2.26
	413020	R98736		R98736: yv31h09.r1 Soares fetal liver spl	2.26
	413939	AL047051	Hs.199961	Hs.199961: ESTs, Weakly similar to hypo	2.26
	408681	AW963853	Hs.281462	Hs.281462: hypothetical protein FLJ14251	2.25
	412330	NM_005100	Hs.788	NM_005100: Homo sapiens A kinase (PRKA) anc	2.25
75	442083	R50192	Hs.165062	Hs.165062: ESTs	2.25
	418271	NM_000919	Hs.83920	NM_000919: Homo sapiens peptidylglycine a	2.25
	433376	AI249361	Hs.74122	NM_001225: Homo sapiens caspase 4, apopto	2.25
	438562	AI568826	Hs.25890	Hs.25890: ESTs, Weakly similar to transdu	2.25
	443883	AA114212	Hs.9930	NM_001235: Homo sapiens serine (or cystei	2.25
80	416976	BE243985	Hs.80680	Hs.80680: major vault protein	2.24
	416914	AA344481	Hs.80426	Hs.80426: brain and reproductive organ-ex	2.24
	400288	X06255	Hs.149609	NM_002205: Homo sapiens integrin, alpha 5	2.24
	407904	W44735	Hs.107260	Hs.107260: putative UDP-GalC: polypeptide	2.24
	429690	AW956329	Hs.23721	Hs.23721: ESTs	2.24

	443813	AA876372	Hs.93961	Hs.93961:Homo sapiens mR; cD DKFZp667D09	2.24
	427458	BE208364	Hs.29283	Hs.29283:ESTs, Weakly similar to UKHU pr	2.24
	454294	AB000734	Hs.50640	NM_003745:Homo sapiens JAK binding prote	2.24
	407192	AA609200	Hs.366318	Hs.366318:ESTs	2.23
5	425751	T19239	Hs.1940	NM_001885:Homo sapiens crystallin, alpha	2.23
	456437	AI924228	Hs.115185	Hs.115185:ESTs	2.23
	413019	BE281604	Hs.75140	NM_002337:Homo sapiens low density lipop	2.23
	418862	BE550984	Hs.89399	Hs.89399:ATP synthase, H+ transporting,	2.23
10	435284	AA879470	Hs.96849	Hs.96849:Homo sapiens cD FLJ11492 fis, c	2.23
	429630	M85289	Hs.211573	NM_005529:Homo sapiens heparan sulfate p	2.23
	427609	AK000435	Hs.179791	Hs.179791:RAB20, member RAS oncogene fam	2.23
	421917	AB028943	Hs.109445	Hs.109445:hypermethylated in cancer 2	2.23
	446616	R65964	Hs.334873	Hs.334873:carboxypeptidase M	2.23
	407232	X04526		X04526:Human liver mR for beta-subunit s	2.23
15	423798	AF047033	Hs.132904	Hs.132904:solute carrier family 4, sodiu	2.23
	446755	AW451473	Hs.16134	NM_005990:Homo sapiens serine/threonine	2.22
	452665	AI924046	Hs.119567	Hs.119567:ESTs, Weakly similar to ALU1_H	2.22
	431393	AW971493	Hs.134269	Hs.134269:ESTs, Weakly similar to 200439	2.22
20	431890	X17033	Hs.271986	NM_002203:Homo sapiens integrin, alpha 2	2.22
	428782	X12830	Hs.193400	NM_000565:Homo sapiens interleukin 6 rec	2.22
	446006	NM_004403	Hs.13530	NM_004403:Homo sapiens deafness, autosom	2.22
	436418	AJ245874	Hs.4245	Hs.4245:chromosome 11 hypothetical prote	2.22
	423869	BE409301	Hs.134012	NM_006688:Homo sapiens C1q-related facto	2.21
25	437730	AW071087	Hs.239176	Hs.239176:insulin-like growth factor 1 r	2.21
	444020	R92982	Hs.35052	Hs.35052:ESTs	2.21
	413882	AA132973	Hs.184492	Hs.184492:Homo sapiens mR; cD DKFZp667B0	2.21
	412654	AI093480	Hs.374319	Hs.374319:ESTs	2.21
	448988	Y09763	Hs.22785	NM_004961:Homo sapiens gamma-aminobutyri	2.21
30	426841	AI052358	Hs.131741	Hs.131741:ESTs	2.21
	408196	AL034548	Hs.43627	NM_006943:Homo sapiens SRY (sex determin	2.21
	451711	AK000461	Hs.26890	Hs.26890:cat eye syndrome chromosome reg	2.20
	414325	AA251929	Hs.355341	Hs.355341:Homo sapiens, clone IMAGE:3536	2.20
	424512	X53002	Hs.149846	NM_002213:Homo sapiens integrin, beta 5	2.20
35	448883	BE614989	Hs.7503	Hs.7503:hypothetical protein FLJ14153	2.20
	411296	BE207307	Hs.10114	Hs.10114:growth suppressor 1	2.20
	452268	NM_003512	Hs.28777	NM_003512:Homo sapiens H2A histone famil	2.20
	416810	AF035606	Hs.80019	NM_013232:Homo sapiens programmed cell d	2.20
	441415	H12497	Hs.7471	Hs.7471:BBP-like protein 1	2.20
40	444212	AW503976	Hs.10649	NM_004848:Homo sapiens basement membrane	2.19
	428044	AA093322	Hs.301404	NM_006743:Homo sapiens R binding motif p	2.19
	430017	AA263172	Hs.35	NM_002832:Homo sapiens protein tyrosine	2.19
	424490	AJ278016	Hs.55565	Hs.55565:ankyrin repeat domain 3	2.19
	431193	AW749505	Hs.296770	Hs.296770:KIAA1719 protein	2.19
45	453686	AL110326	Hs.304679	Hs.304679:ESTs, Weakly similar to Z195_H	2.19
	448262	AW880830	Hs.186273	Hs.186273:ESTs	2.19
	416065	BE267931	Hs.78996	NM_002592:Homo sapiens proliferating cel	2.19
	442045	C05768	Hs.8078	Hs.8078:Homo sapiens clone FBD3 Cri-du-c	2.19
	423804	AW403448	Hs.1706	NM_006084:Homo sapiens interferon-stimul	2.19
	428024	Z29067	Hs.2238	Hs.2238:NIMA (never in mitosis gene a)-r	2.19
50	424503	NM_002205	Hs.149609	NM_002205:Homo sapiens integrin, alpha 5	2.19
	437696	Z83844	Hs.5790	Hs.5790:hypothetical protein dJ37E16.5	2.18
	405204				2.18
	426158	NM_001982	Hs.199067	NM_001982:Homo sapiens v-erb-b2 erythro	2.18
55	417418	NM_002468	Hs.82116	NM_002468:Homo sapiens myeloid different	2.18
	412773	H15785	Hs.74573	NM_012268:Homo sapiens similar to vaccin	2.18
	409402	AF208234	Hs.695	NM_000100:Homo sapiens cystatin B (slefi	2.18
	443791	N84458	Hs.143345	Hs.143345:ESTs	2.18
60	435049	AL122067	Hs.4746	Hs.4746:hypothetical protein FLJ21324	2.18
	418389	AA830613	Hs.293849	Hs.293849:ESTs	2.18
	450712	AI732130	Hs.270496	Hs.270496:ESTs, Weakly similar to ALUB_H	2.18
	422007	AI739435	Hs.39168	Hs.39168:ESTs, Weakly similar to T17340	2.18
	453676	AW853745	Hs.286035	Hs.286035:hypothetical protein FLJ22686	2.18
	415718	F30631	Hs.200237	Hs.200237:ESTs	2.18
65	452688	AA721140	Hs.49930	Hs.49930:ESTs, Weakly similar to B34087	2.18
	419588	BE407713	Hs.78943	NM_000386:Homo sapiens bleomycin hydrola	2.18
	409453	AI885516	Hs.95612	Hs.95612:ESTs	2.17
	417512	X76534	Hs.82226	NM_002510:Homo sapiens glycoprotein (tra	2.17
	427202	BE272922	Hs.173936	NM_000628:Homo sapiens interleukin 10 re	2.17
70	440983	M20681	Hs.7594	NM_006931:Homo sapiens solute carrier fa	2.17
	416084	L16991	Hs.79006	NM_012145:Homo sapiens deoxythymidylate	2.17
	429642	X68264	Hs.211579	NM_006500:Homo sapiens melanoma adhesio	2.17
	427213	AW007211	Hs.348389	Hs.348389:hypothetical protein FLJ12876	2.17
	437763	AA469389	Hs.5831	NM_003254:Homo sapiens tissue inhibitor	2.17
75	454000	AA040620	Hs.5672	Hs.5672:golgi membrane protein SB140	2.17
	424247	X14008	Hs.234734	NM_000239:Homo sapiens lysozyme (ref amy	2.16
	403857				2.16
	406648	AA563730	Hs.277477	Hs.277477:major histocompatibility compl	2.16
	400265				2.16
80	442379	NM_004613	Hs.8265	NM_004613:Homo sapiens transglutaminase 2	2.16
	441892	AB028981	Hs.8021	Hs.8021:KIAA1058 protein	2.16
	417446	AL118671	Hs.82163	NM_000898:Homo sapiens monoamine oxidase	2.16
	418386	AA361739	Hs.84549	NM_002494:Homo sapiens OH dehydrogenase (u	2.16
	414053	BE391835	Hs.75725	NM_003564:Homo sapiens transgelin 2 (TAG	2.16

	440906	AW161556	Hs.240170	Hs.240170:hypothetical protein MGC2731	2.16
	447660	AW160386	Hs.163667	Hs.163667:ESTs, Weakly similar to CA1H_H	2.16
	408279	AF216965	Hs.44095	Hs.44095:cyclin M3	2.16
5	426152	BE289190	Hs.167246	Hs.167246:P450 (cytochrome) oxidoreducta	2.16
	437952	D63209	Hs.5944	NM_014585:Homo sapiens solute carrier fa	2.16
	415661	AF057307	Hs.78575	Hs.78575:prosaposin (variant Gaucher dis	2.15
	425302	U79115	Hs.155566	NM_003805:Homo sapiens CASP2 and RIPK1 d	2.15
	425996	W67330	Hs.374451	Hs.374451:ESTs	2.15
10	413745	AW247252	Hs.75514	NM_000270:Homo sapiens nucleoside phosph	2.15
	422070	AF149785	Hs.111126	Hs.111126:pituitary tumor-transforming 1	2.15
	448424	AW008892	Hs.31924	Hs.31924:ESTs	2.15
	430035	NM_003463	Hs.227777	NM_003463:Homo sapiens protein tyrosine	2.15
	438407	AA571122	Hs.129673	Hs.129673:eukaryotic translation initiat	2.15
15	435551	AF212365	Hs.5470	Hs.5470:interleukin 17B receptor	2.15
	437741	BE561610	Hs.5809	Hs.5809:putative transmembrane protein;	2.15
	441192	AA526626	Hs.7738	NM_016504:Homo sapiens mitochondrial rib	2.15
	435750	AB029012	Hs.4990	Hs.4990:KIAA1089 protein	2.15
	411165	NM_000169	Hs.69089	NM_000169:Homo sapiens galactosidase, al	2.14
20	425252	AW391162	Hs.349306	Hs.349306:hypothetical protein FLJ31951	2.14
	427600	AW630918	Hs.179774	NM_002818:Homo sapiens proteasome (proso	2.14
	426818	AA554827	Hs.292996	Hs.292996:postmeiotic segregation increa	2.14
	442110	AF113008	Hs.8102	NM_001023:Homo sapiens ribosomal protein	2.14
	407797	AK000524	Hs.39850	Hs.39850:uridine kise-6ke 1	2.14
	443044	N28522	Hs.8935	NM_014298:Homo sapiens quinoilic phospho	2.14
25	437103	AW139408	Hs.152940	Hs.152940:ESTs	2.14
	442069	AW664144	Hs.297007	Hs.297007:Homo sapiens cD FLJ32174 fs.	2.14
	424954	NM_000546	Hs.1846	NM_000546:Homo sapiens tumor protein p53	2.14
	458097	AW341135	Hs.58104	Hs.58104:Homo sapiens, clone IMAGE:47309	2.14
30	411925	AW014588	Hs.72925	NM_003475:Homo sapiens chromosome 11 ope	2.14
	449644	AW960707	Hs.148324	Hs.148324:ESTs	2.14
	422675	BE018517	Hs.119140	NM_001970:Homo sapiens eukaryotic transl	2.14
	429586	M36712	Hs.2299	Hs.2299:CD8 antigen, beta polypeptide 1	2.14
	429379	NM_014840	Hs.200598	NM_014840:Homo sapiens KIAA0537 gene pro	2.13
35	410290	AA402307	Hs.322844	Hs.322844:hypothetical protein DKFZp564A	2.13
	443895	AW979048	Hs.292566	Hs.292566:YEA4 protein	2.13
	428145	BE243327	Hs.182626	NM_012264:Homo sapiens chromosome 22 ope	2.13
	453518	AW503205	Hs.27268	Hs.27268:Homo sapiens cD: FLJ21933 fs.	2.13
	456534	X91195	Hs.100623	Hs.100623:protein phosphatase 1, regulat	2.13
40	419972	AL041465	Hs.182982	Hs.182982:galin-67	2.13
	424950	AA602917	Hs.156974	Hs.156974:ESTs	2.13
	427557	NM_002659	Hs.179657	NM_002659:Homo sapiens plasminogen activ	2.13
	431449	M55994	Hs.256278	NM_001066:Homo sapiens tumor necrosis fa	2.13
	418758	AW959311	Hs.172012	Hs.172012:hypothetical protein DKFZp434J	2.13
45	434202	BE382411	Hs.3764	NM_000858:Homo sapiens guanylate kise 1	2.13
	433233	AB040927	Hs.301804	Hs.301804:KIAA1494 protein	2.12
	452700	AB59390	Hs.288940	Hs.288940:transmembrane protein 8 (five	2.12
	438033	T26483	Hs.6059	NM_016938:Homo sapiens EGF-containing fi	2.12
	400847				2.12
50	447547	NM_007229	Hs.18842	NM_007229:Homo sapiens protein kise C an	2.12
	417052	NM_000712	Hs.81029	NM_000712:Homo sapiens biliverdin reduct	2.12
	413284	AL077055	Hs.289107	NM_001166:Homo sapiens baculoviral IAP r	2.11
	434558	AW264102	Hs.39168	Hs.39168:ESTs, Weakly similar to T17340	2.11
	404030				2.11
55	410801	BE275469	Hs.66493	Hs.66493:Down syndrome critical region g	2.11
	418813	AA744529	Hs.85575	Hs.85575:mitogen-activated protein kise	2.11
	447087	AW403870	Hs.301872	Hs.301872:hypothetical protein MGC4840	2.11
	433026	AW160616	Hs.279921	NM_016127:Homo sapiens hypothetical prot	2.11
	426433	I38969	Hs.169875	NM_007112:Homo sapiens thrombospondin 3	2.11
60	442439	U09759	Hs.246857	NM_002752:Homo sapiens mitogen-activated	2.11
	437379	AL359575	Hs.23765	Hs.23765:membrane metallo-endopeptidase-	2.11
	400208				2.11
	455705	AW161061	Hs.356580	Hs.356580:ESTs, Weakly similar to zinc f	2.11
	417599	AA204688	Hs.62954	Hs.62954:feritin, heavy polypeptide 1	2.10
65	416728	AB024597	Hs.79658	NM_001894:Homo sapiens casein kise 1, ep	2.10
	439920	H05430	Hs.288433	Hs.288433:neurotrophin	2.10
	422309	U79745	Hs.114924	NM_004694:Homo sapiens solute carrier fa	2.10
	436114	AA778232	Hs.19515	Hs.19515:ESTs, Highly similar to NRG3_HU	2.10
	405517				2.10
70	421872	AA359753	Hs.22824	Hs.22824:MYB binding protein (P160) 1a	2.10
	437712	X04588	Hs.85844	Hs.85844:neurotrophic tyrosine kise, rec	2.10
	431214	AA294921	Hs.348024	NM_002881:Homo sapiens v-rat simian leuk	2.10
	412856	BE388745	Hs.74631	NM_001728:Homo sapiens basigin (BSG), mR	2.10
	442064	AI422867	Hs.88594	Hs.88594:Homo sapiens, clone IMAGE:43329	2.10
	434845	BE267057	Hs.325321	Hs.325321:WD repeat domain 18	2.10
75	426728	NM_007118	Hs.387689	NM_007118:Homo sapiens triple functio	2.10
	419596	BE379320	Hs.91448	NM_007026:Homo sapiens dual specificity	2.09
	448913	AA194422	Hs.22564	NM_004999:Homo sapiens myosin VI (MYO6),	2.09
	414721	X90392	Hs.77091	NM_008730:Homo sapiens deoxyribonuclease	2.09
80	424658	NM_002406	Hs.151513	NM_002406:Homo sapiens mannosyl (alpha-1	2.09
	432605	X94630	Hs.3107	Hs.3107:CD97 antigen	2.09
	447032	AK000310	Hs.17138	Hs.17138:hypothetical protein FLJ20303	2.09
	447484	AA454839	Hs.292566	Hs.292566:YEA4 protein	2.09
	440188	AK001812	Hs.7036	Hs.7036:N-acetylglucosamine kise	2.09



	445584	AF217518	Hs.8360	Hs.8360:PTD012 protein	2.09
	402559				2.09
	418043	AW377752	Hs.83341	Hs.83341:AXL receptor tyrosine kase	2.09
5	448888	AW196683	Hs.200242	Hs.200242:caspace recruitment domain fam	2.09
	436910	AA926944	Hs.261587	Hs.261587:GCN2 eIF2alpha kase	2.09
	422573	AW297985	Hs.295726	Hs.295726:integrin, alpha V (vitronectin	2.08
	416448	L13210	Hs.79339	NM_005587:Homo sapiens lectin, galactosi	2.08
	428727	AF078847	Hs.191356	NM_001515:Homo sapiens general transcrip	2.08
10	410301	AW502935	Hs.740	Hs.740:PTK2 protein tyrosine kase 2	2.08
	449538	AI559444	Hs.104679	Hs.104679:Homo sapiens, clone MGC:18216	2.08
	421205	AL137540	Hs.102541	Hs.102541:netrin 4	2.08
	411779	AA292811	Hs.72050	NM_003551:Homo sapiens non-metastatic ce	2.08
	427704	AW971063	Hs.292882	Hs.292882:ESTs	2.07
15	413518	BE149455	Hs.75415	NM_004048:Homo sapiens beta-2-microglobu	2.07
	447345	BE247767	Hs.18166	Hs.18166:KIAA0870 protein	2.07
	407143	C14076	Hs.332329	Hs.332329:EST	2.07
	448431	BE613081	Hs.337772	Hs.337772:hypothetical protein BC009331	2.07
	412760	AW379030	Hs.41324	Hs.41324:ESTs	2.07
20	446859	AJ494299	Hs.16297	NM_005694:Homo sapiens COX17 homolog, cy	2.07
	403986				2.07
	409115	AI223335	Hs.50651	NM_002227:Homo sapiens Janus kase 1 (a p	2.07
	436823	AW749865	Hs.117077	Hs.117077:zinc finger protein 264	2.07
	414045	NM_002951	Hs.75722	NM_002951:Homo sapiens ribophorin II (RP	2.06
25	413980	NM_002437	Hs.75659	NM_002437:Homo sapiens MpV17 transgene,	2.06
	439414	NM_001183	Hs.6551	NM_001183:Homo sapiens ATPase, H+ transp	2.06
	426059	BE292842	Hs.166120	NM_001572:Homo sapiens interferon regula	2.06
	429849	U33053	Hs.2499	NM_002741:Homo sapiens protein kase C-5	2.06
	402424				2.06
30	406626	X04526	Hs.215595	Hs.215595:guanine nucleotide binding pro	2.06
	458911	AA373131	Hs.24322	Hs.24322:ATPase, H+ transporting, lysoso	2.05
	426086	T94907	Hs.188572	Hs.188572:ESTs	2.05
	419726	U50330	Hs.1274	NM_006129:Homo sapiens bone morphogeneti	2.05
	452344	AI264357	Hs.55405	Hs.55405:hypothetical protein MGC16212	2.05
35	442498	U54617	Hs.8364	NM_002612:Homo sapiens pyruvate dehydrog	2.05
	422114	AW194851	Hs.111801	NM_015808:Homo sapiens arsele resistance	2.05
	413420	AW410235	Hs.75348	NM_006263:Homo sapiens proteasome (proso	2.05
	409430	R21945	Hs.346735	Hs.346735:Homo sapiens, clone IMAGE:3881	2.05
	409932	AI376750	Hs.57600	Hs.57600:adaptor-related protein complex	2.05
40	434848	BE256304	Hs.32148	Hs.32148:AD-015 protein	2.04
	453852	AW961818	Hs.374424	Hs.374424:ESTs	2.04
	427637	AK000816	Hs.179986	NM_005803:Homo sapiens flotillin 1 (FLOT	2.04
	400264				2.04
	430016	NM_004735	Hs.227656	NM_004735:Homo sapiens xenotropic and po	2.04
45	410134	U68140	Hs.58927	Hs.58927:nuclear VCP-like	2.04
	440975	AW499914	Hs.7579	Hs.7579:importin 9	2.04
	432280	BE440142	Hs.2943	NM_003135:Homo sapiens sigl recognition	2.04
	409504	AA304961	Hs.699	NM_000942:Homo sapiens peptidylprolyl is	2.04
	412146	M92444	Hs.73722	NM_001641:Homo sapiens APEX nuclease (mu	2.04
50	434203	BE262677	Hs.283558	Hs.283558:hypothetical protein PRO1855	2.04
	422754	AA316476	Hs.171811	Hs.171811:adenylate kase 2	2.04
	406729	AA069711		AA069711:zms52b11.s1 Stragene fibroblas	2.04
	413086	AA126841	Hs.183834	Hs.183834:ESTs	2.03
	424340	AA339036	Hs.7033	Hs.7033:ESTs	2.03
55	450440	AB024334	Hs.25001	NM_012479:Homo sapiens tyrosine 3-monoox	2.03
	424662	NM_002870	Hs.151536	NM_002870:Homo sapiens RAB13, member RAS	2.03
	415740	N80486	Hs.39911	Hs.39911:Homo sapiens mR for FLJ00089 pr	2.03
	412749	AA378417	Hs.74564	NM_003145:Homo sapiens sigl sequence rec	2.03
	408393	AW015318	Hs.23165	Hs.23165:ESTs	2.03
60	421295	AW081081	Hs.103180	Hs.103180:DC2 protein	2.03
	445417	AK001058	Hs.12680	Hs.12680:Homo sapiens cD FLJ10196 fls, c	2.03
	414883	AA926960	Hs.348569	NM_001826:Homo sapiens CDC28 protein kls	2.03
	447298	BE617527	Hs.239818	Hs.239818:phosphoinositide-3-kase, catal	2.02
65	459580	AA022888	Hs.176065	Hs.176065:ESTs	2.02
	422785	AI824114	Hs.289088	Hs.289088:heat shock 90kD protein 1, alp	2.02
	452696	AI826645	Hs.211534	Hs.211534:Homo sapiens cD FLJ31565 fls,	2.02
	452056	AW955065	Hs.101150	Hs.101150:KIAA1949 protein	2.02
	450690	AA296696	Hs.333418	NM_014164:Homo sapiens FXYD domain-conta	2.02
	423527	AI206965	Hs.105861	Hs.105861:engulfment and cell motility 3	2.01
70	429545	AI824164	Hs.356130	Hs.356130:ESTs	2.01
	439180	AJ393742	Hs.199067	Hs.199067:v-erb-b2 erythroblastic leukem	2.01
	437193	BE259190	Hs.289721	Hs.289721:growth arrest-specific 5	2.01
	436014	AF281134	Hs.263741	Hs.263741:exosome component Rrp46	2.01
	453329	T97205	Hs.193400	Hs.193400:interleukin 6 receptor	2.01
75	407347	AA829847		T23514:seq3329 1-NIB Homo sapiens cD clo	2.01
	435370	AI964074	Hs.225838	Hs.225838:ESTs	2.01
	430657	AA482910	Hs.370602	Hs.370602:ESTs, Weakly similar to hypoth	2.01
	427157	U51166	Hs.173824	NM_003211:Homo sapiens thymine-D glycosy	2.01
	424833	NM_003894	Hs.153405	NM_003894:Homo sapiens period homolog 2	2.01
80	440086	NM_005402	Hs.6906	NM_005402:Homo sapiens v-ref simian leuk	2.01
	438543	AA810141	Hs.192182	Hs.192182:ESTs	2.01
	417426	NM_002291	Hs.82124	NM_002291:Homo sapiens laminin, beta 1 (	2.01
	412790	NM_014767	Hs.74583	NM_014767:Homo sapiens KIAA0275 gene pro	2.01
	445892	AV655600	Hs.93961	Hs.93961:Homo sapiens mR; cD DKFZp667D09	2.01

TABLE 38B:

Key: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

5	Pkey	CAT Number	Accession
10	409745	MH1944_5	BI030997 AA921874 AW188822 BI027862 AJ347618 AJ361453 AJ088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625 BI027864 BI009100 BI006275 BI006270 BI031000 BI029854 BI006277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377 AA150780 BI033518 BI027818 BG015789 BI033807 AA341445 N64410 AA248866 AA248779 W02010 AL390180 AA359908 BE177778 BE177779 AW893733 BF756318
15	419671	253275_1	437495 65231_1 418869 12789_14 432648 129028_1 421902 276321_1 414667 MH1944_5
20	435185	127115_1	411331 1076355_1 451878 2328579_1 400261 23110_1
25	439195	21979_1	454694 1065666_1 416913 924456_1 459362 1238130_1
30			BI030997 AA921874 AW188822 BI027862 AJ347618 AJ361453 AJ088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625 BI027864 BI009100 BI006275 BI006270 BI031000 BI029854 BI006277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377 AA150780 BI033518 BI027818 BG015789 BI033807 AA341445 AW173494 AJ804346 AA669490 AW837178 T77002 F13038 T63141 AJ821021 BF370092 BF370127 BF370060 T62998 BC006097 X03066 NM_002120 M26040 AW469119 AW469127 AJ299772 AW518149 AJ144456 AW626070 AI629032 AI358810 AI880433 AI440472 AJ357070 AI865365 AW014799 AJ767973 AW518041 AA909398 AW768606 AF086037 H89360 H89546 AW936378 AW936544 AW813513 AW934714 AW749664 AW749902 BE162498 BE161005 BE162499 BE161006 AA190449 AW513465 BE162500 BE161007 AW974073 T56957

TABLE 38C:

Key: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA  
 Strand: sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

35	Pkey	Ref	Strand	Nt_position
40	403346	8569726	Plus	92752-93015
	401821	8570184	Minus	193-608
	403344	8569726	Plus	70823-70990
	404240	5002624	Minus	116132-116407,116553-116922
	401964	3126781	Minus	13510-13725,13847-14015
	404277	1834458	Minus	91665-91946
	405121	8102330	Minus	35816-36004,36587-36684
45	402493	9787670	Minus	205146-205240,205428-205542
	402121	9188523	Plus	25692-25895
	402474	7547175	Minus	53526-53628,55755-55920,57530-57757
	403887	7710553	Minus	69533-69868
	403328	8469086	Minus	120428-120703
	401241	4827300	Minus	30503-30844,31056-31248
50	401736	3219338	Plus	1771-1894
	405029	7533975	Minus	37929-38224
	404171	9930793	Plus	173667-173783,176876-177055
	401797	6730720	Plus	6973-7118
55	401234	9929642	Plus	120173-120337
	404170	9930793	Plus	168836-169248
	406122	9144087	Minus	30940-31386

TABLE 39A: 856 GENES UP-REGULATED IN RENAL CANCER COMPARED TO NORMAL ADULT TISSUES AND TO NON-MALIGNANT RENAL TISSUES THAT ARE LIKELY TO ENCODE PROTEINS AMENABLE TO MODULATION BY SMALL MOLECULES, PEPTIDES, OR ANTIBODIES

Table 39A lists about 856 genes up-regulated in renal cancer compared to normal adult tissues and to non-malignant renal tissues that are likely to encode proteins amenable to modulation by small molecules, peptides, or antibodies. These were selected from the starting collection of 59680 probesets on the Affymetrix/Eos-Hu03 GeneChip® array as follows: the ratio of "average" renal cancer to "average" normal adult tissues was greater than or equal to 2.0, the ratio of "average" renal cancer to "average" non-malignant renal tissues was greater than or equal to 2.0, the "average" renal cancer level was set to the 90th percentile value amongst various renal specimens, the "average" normal adult tissue level was set to the 70th percentile value amongst various non-malignant tissues, the "average" non-malignant renal tissues level was set to the 50th percentile value amongst various non-malignant renal tissues, the "average" renal cancer value was greater than or equal to 50 units, and the predicted protein contained a structural domain that is indicative of having an oncogenic function or of transducing an intracellular signal, or of being modifiable by small molecules, peptides, or antibodies (e.g. kinase, death-domain, 7tm, phosphatase, or ion transporter).

Key: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal adult tissues

75	Pkey	ExAccn	UnigenelD	Unigene Title	R1
	435013	H91923	Hs.110024		15.71
	447768	X88400	Hs.19520	Hs.19520:FXD domain-containing ion tran	14.07
	445178	AI792241	Hs.129614	Hs.129614:kidney-specific membrane prote	12.56
	432542	AW083920	Hs.16098	Hs.16098:claudin 2	12.41
80	443595	AF169312	Hs.9613	NM_016109:Homo sapiens angiopoietin-like	11.77
	413719	BE439580	Hs.75498	NM_004591:Homo sapiens small inducible c	10.39
	436878	BE465204	Hs.47448	Hs.47448:ESTs	10.18
	440304	BE159984	Hs.125395	Hs.125395:ESTs	9.95
	407065	Y10141			9.58

	413049	NM_002151	Hs.823	NM_002151: Homo sapiens hepsin (transmembr	9.51
	425983	AK000226	Hs.165619	Hs.165619: mucin and cadherin-like	8.88
	423161	AL049227	Hs.124776	Hs.124776: Homo sapiens mR; cD DKFZp564N1	8.77
	430569	AF241254	Hs.178098	Hs.178098: angiotensin I converting enzyme	8.45
5	416768	AA363733	Hs.1032	NM_002909: Homo sapiens regenerating isle	7.94
	422357	AF016272	Hs.115418	NM_004062: Homo sapiens cadherin 18, KSP-	7.78
	420737	L08096	Hs.99899	NM_001252: Homo sapiens tumor necrosis fa	7.78
	409745	AA077391		AA077391: 7B14E12 Chromosome 7 Fetal Bral	7.74
10	413938	AF113876	Hs.297681	NM_000295: Homo sapiens serine (or cyste	7.32
	426682	AV660038	Hs.2056	Hs.2056: UDP glycosyltransferase 1 family	7.20
	406851	AA609784	Hs.352392	Hs.352392: major histocompatibility compl	7.03
	419508	AW979338	Hs.90786	Hs.90786: ATP-binding cassette, sub-famil	6.57
	428953	AA306610	Hs.348183	NM_003823: Homo sapiens tumor necrosis fa	6.36
	436895	AF037335	Hs.5338	NM_001218: Homo sapiens carbonic anhydras	6.31
15	431842	NM_005764	Hs.271473	NM_005764: Homo sapiens epithelial protei	6.20
	430014	H59354	Hs.374303	Hs.374303: hypothetical protein MGC20576	6.20
	423803	NM_005709	Hs.132945	NM_005709: Homo sapiens PDZ-73 protein (P	6.19
	434779	AF153815	Hs.50151	Hs.50151: potassium inwardly-rectifying c	6.11
20	435767	H73505	Hs.117874	Hs.117874: ESTs	6.08
	422684	AA315933	Hs.120879	Hs.120879: Homo sapiens, clone MGC:32871	6.02
	425280	U31519	Hs.1872	Hs.1872: phosphoenolpyruvate carboxyase	5.81
	426559	AB001914	Hs.170414	NM_002570: Homo sapiens paired basic amin	5.73
	451564	AU076698	Hs.132760	NM_001487: Homo sapiens glucose-6-phospha	5.69
25	418526	BE019020	Hs.85838	NM_004207: Homo sapiens solute carrier fa	5.68
	444151	AW972917	Hs.128749	Hs.128749: alpha-methylacyl-CoA racemase	5.66
	426471	M22440	Hs.170009	NM_003236: Homo sapiens transforming grow	5.48
	432579	AF043244	Hs.276439	NM_003946: Homo sapiens nucleolar protein	5.45
	448733	NM_005629	Hs.187958	NM_005629: Homo sapiens solute carrier fa	5.42
30	446650	AB016625	Hs.15813	NM_003060: Homo sapiens solute carrier fa	5.36
	417089	H52280	Hs.18612	Hs.18612: Homo sapiens cD: FLJ21909 fts,	5.35
	437848	AJ06419	Hs.284380	Hs.284380: gamma-glutamyltransferase 1	5.32
	423081	AF262992	Hs.123159	Hs.123159: sperm associated antigen 4	5.30
	421893	NM_001078	Hs.109225	NM_001078: Homo sapiens vascular cell adh	5.23
35	435886	BE265839	Hs.12126	Hs.12126: hepatocellular carcinoma-associ	5.20
	410276	AJ54545	Hs.359201	Hs.359201: ESTs	5.20
	429451	BE409861	Hs.202833	NM_002133: Homo sapiens heme oxygenase (dec	5.14
	446404	AA018961	Hs.26216	Hs.26216: Homo sapiens cD: FLJ22811 fts,	5.13
	423445	NM_014324	Hs.128749	NM_014324: Homo sapiens alpha-methylacyl-	5.09
40	449444	AWB18438	Hs.351306	NM_004696: Homo sapiens solute carrier fa	5.05
	438106	BE245551	Hs.6079	NM_014863: Homo sapiens B cell RAG associ	5.02
	400419	AF084545		AF084545: Homo sapiens versican Vint isofo	5.01
	453920	AJ133148	Hs.36602	NM_000204: Homo sapiens I factor (complem	4.99
	447881	BE620886	Hs.355279	Hs.355279: Homo sapiens cD FLJ23711 fts,	4.97
45	422253	W81526	Hs.113882	NM_000815: Homo sapiens gamma-aminobutyri	4.93
	439024	R66966	Hs.35598	Hs.35598: ESTs	4.88
	414799	AJ752416	Hs.77326	NM_000598: Homo sapiens insulin-like grow	4.80
	426530	U24578	Hs.278625	NM_000592: Homo sapiens complement compon	4.77
	410055	AJ250839	Hs.58241	Hs.58241: gene for serine/threonine prote	4.72
50	404240				4.71
	414617	AJ339520	Hs.288817	Hs.288817: hypothetical protein FLJ22761	4.68
	448249	AW855331	Hs.337124	Hs.337124: ESTs	4.67
	447818	W79940	Hs.21906	Hs.21906: Homo sapiens clone 24670 mR seq	4.66
	449057	AB037784	Hs.22941	Hs.22941: KIAA1363 protein	4.66
55	422424	AJ185431	Hs.296638	NM_004864: Homo sapiens prostate differen	4.62
	417336	R70429	Hs.81988	NM_001343: Homo sapiens disabled homolog	4.62
	425873	NM_013390	Hs.160417	NM_013390: Homo sapiens transmembrane pro	4.58
	444700	NM_003645	Hs.11729	NM_003645: Homo sapiens fatty-acid-Coenzy	4.58
	414998	NM_002543	Hs.77729	NM_002543: Homo sapiens oxidised low dens	4.56
60	414763	U97276	Hs.77266	NM_002826: Homo sapiens quiescin Q6 (QSCN	4.48
	443358	H65417	Hs.17757	Hs.17757: pleckstrin homology domain-cont	4.45
	440091	AJ767388	Hs.37890	Hs.37890: Homo sapiens, clone IMAGE:48275	4.43
	447131	NM_004585	Hs.17466	NM_004585: Homo sapiens retinoic acid rec	4.43
	406973	M34996	Hs.198253	Hs.198253: major histocompatibility compl	4.42
65	427740	BE242604	Hs.180616	NM_005505: Homo sapiens CD36 antigen (col	4.40
	435258	AW867491	Hs.107125	Hs.107125: plasma membrane vesicle associat	4.38
	452884	C05964	Hs.31841	Hs.31841: ESTs	4.37
	444006	BE395085	Hs.10086	NM_016639: Homo sapiens type I transmembr	4.38
	422627	BE336857	Hs.118787	NM_000358: Homo sapiens transforming grow	4.35
70	418054	NM_002318	Hs.83354	NM_002318: Homo sapiens lysyl oxidase-lik	4.34
	419011	H56244	Hs.89552	NM_000846: Homo sapiens glutathione S-tra	4.34
	404277				4.33
	435663	AF210317	Hs.95497	Hs.95497: solute carrier family 2 (facili	4.30
	431779	AW971178	Hs.268571	NM_001645: Homo sapiens apolipoprotein C-	4.29
75	406645	M57466	Hs.814	Hs.814: major histocompatibility complex,	4.28
	421485	AA243499	Hs.104800	Hs.104800: hypothetical protein FLJ10134	4.26
	426812	AF105365	Hs.172613	NM_005598: Homo sapiens solute carrier fa	4.25
	407910	AA650274	Hs.41296	NM_013281: Homo sapiens fibronectin leuci	4.22
	438030	X58427	Hs.122634	Hs.122634: ESTs	4.22
80	430861	AC005551	Hs.130714	Hs.130714: ESTs, Moderately similar to AF	4.21
	444381	BE387335	Hs.283713	Hs.283713: hypothetical protein BC014245	4.20
	438203	BE540090	Hs.7345	Hs.7345: MAD1 mitotic arrest deficient-5	4.16
	411358	R47479	Hs.94761	Hs.94761: KIAA1691 protein	4.15
	418323	NM_002118	Hs.1162	NM_002118: Homo sapiens major histocompat	4.12

44853	AF006823	Hs.24040	NM_002246:Homo sapiens potassium channel	4.11
415198	AW009480	Hs.943	NM_004221:Homo sapiens tural killer cell	4.11
418751	BE389014	Hs.372548	Hs.372548:phosphoinositide-3-kinase, regul	4.09
414166	AW88941	Hs.75789	NM_006096:Homo sapiens N-myc downstream	4.07
424125	M31669	Hs.1735	Hs.1735:inhibin, beta B (activin AB beta	4.00
416926	H03109	Hs.263395	Hs.263395:sema domain, transmembrane dom	3.92
419175	AW270037	Hs.362996	Hs.362996:KIAA0779 protein	3.92
424218	AF031824	Hs.143212	NM_003650:Homo sapiens cystatin F (leuko	3.91
412870	NZ2788	Hs.82407	Hs.82407:chemokine (C-X-C motif) ligand	3.88
452203	X57522	Hs.352018	NM_000593:Homo sapiens transporter 1, AT	3.87
446872	X97058	Hs.16362	NM_004154:Homo sapiens pyrimidinergic re	3.87
449961	AW265634	Hs.133100	Hs.133100:ESTs	3.87
424517	AU539443	Hs.137447	Hs.137447:Homo sapiens cD FLJ12169 fs,	3.86
425262	D87119	Hs.155418	Hs.155418:GS3955 protein	3.83
443639	BE269042	Hs.9661	NM_002801:Homo sapiens proteasome (proso	3.82
448133	AA723157	Hs.73769	NM_000802:Homo sapiens folate receptor 1	3.81
418030	BE207573	Hs.83321	Hs.83321:neurexin B	3.81
412939	AW411491	Hs.75069	NM_005412:Homo sapiens serine hydroxymet	3.80
409162	H25530	Hs.50868	NM_002555:Homo sapiens solute carrier fa	3.79
427715	BE245274	Hs.180428	Hs.180428:KIAA1181 protein	3.78
412006	AW451618	Hs.290216	Hs.290216:ESTs	3.77
430413	AW842182	Hs.241392	NM_002985:Homo sapiens small inducible c	3.76
422282	AF019225	Hs.114309	Hs.114309:apolipoprotein L 1	3.76
420747	BE294407	Hs.99910	Hs.99910:phosphotransferase, platelet	3.76
414875	H42679	Hs.77522	NM_006120:Homo sapiens major histocompat	3.75
418793	AW382987	Hs.88474	Hs.88474:prostaglandin-endoperoxide synt	3.74
446291	BE397753	Hs.14623	NM_006332:Homo sapiens interferon, gamma	3.71
417289	D86962	Hs.81875	Hs.81875:growth factor receptor-bound pr	3.69
422672	X12784	Hs.119129	NM_001845:Homo sapiens collagen, type IV	3.68
448569	BE382657	Hs.21486	NM_007315:Homo sapiens sigl transducer a	3.68
437270	R18087	Hs.323769	Hs.323769:cisplatin resistance related p	3.67
408452	AA054683	Hs.192455	Hs.192455:ESTs, Moderately similar to hy	3.67
443986	AI381750	Hs.283437	Hs.283437:HTGN29 protein	3.66
418869	AW516565		AW516565:xq01d05.x1 Soares_NHCCc_cervica	3.65
425998	AU076629	Hs.165950	NM_002011:Homo sapiens fibroblast growth	3.62
428699	AW578252	Hs.190181	NM_014020:Homo sapiens LR8 protein (LR8)	3.62
418299	AA279530	Hs.83968	NM_000211:Homo sapiens integrin, beta 2	3.61
432593	AW301003	Hs.51483	Hs.51483:Homo sapiens, Similar to RIKEN	3.59
415765	NM_005424	Hs.78824	NM_005424:Homo sapiens tyrosine kinase wit	3.58
445985	BE621800	Hs.29444	Hs.29444:putative small membrane protein	3.57
424893	AW295112	Hs.153648	Hs.153648:protein tyrosine phosphatase,	3.57
426046	AA833655	Hs.206868	Hs.206868:Homo sapiens cD FLJ14056 fs,	3.57
424415	NM_001975	Hs.146580	NM_001975:Homo sapiens endolase 2, (gamma	3.57
412612	NM_000047	Hs.74131	NM_000047:Homo sapiens arylsulfatase E (	3.56
443834	AI741510	Hs.173548	Hs.173548:ESTs	3.54
431630	NM_002204	Hs.265829	NM_002204:Homo sapiens integrin, alpha 3	3.53
418371	M13560	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	3.52
444838	AV651680	Hs.208558	Hs.208558:ESTs	3.52
449378	AW664026	Hs.59892	Hs.59892:ESTs, Weakly similar to alpha 5	3.52
411393	AW797437	Hs.69771	NM_001710:Homo sapiens B-factor, properd	3.50
414311	AI693547	Hs.71746	Hs.71746:aminopeptidase-like 1	3.50
415149	X12451	Hs.78056	NM_001812:Homo sapiens cathepsin L (CTSL	3.50
424321	W74048	Hs.1765	Hs.1765:lymphocyte-specific protein tyro	3.49
414825	X06370	Hs.77432	NM_005228:Homo sapiens epidermal growth	3.48
408194	AA601038	Hs.191797	Hs.191797:ESTs	3.48
410600	AW575742	Hs.351676	Hs.351676:ESTs, Weakly similar to T02670	3.47
416899	BE262645	Hs.80420	NM_002996:Homo sapiens small inducible c	3.47
436856	AI469355	Hs.127310	Hs.127310:hypothetical protein BC014917	3.47
419660	BE280337	Hs.194693	NM_003982:Homo sapiens solute carrier fa	3.47
413566	AW604451	Hs.285814	Hs.285814:growth factor receptor-bound p	3.47
412104	AW205197	Hs.240951	Hs.240951:cardiac cuticle homolog 2 (Drosoph	3.46
444488	AW192879	Hs.355660	Hs.355660:peptide-histidine transporter	3.46
449475	AI348027	Hs.108557	Hs.108557:hypothetical protein PP1057	3.46
412276	BE262621	Hs.73798	NM_002415:Homo sapiens macrophage migrat	3.45
449338	H73444	Hs.394	NM_001124:Homo sapiens adrenomedullin (A	3.44
430304	AL122071	Hs.238927	Hs.238927:Homo sapiens mR; cD DKFZp434H1	3.43
415388	AF018081	Hs.78409	(locuslink)NM_030582:Homo sapiens collag	3.43
432210	AI567421	Hs.273330	Hs.273330:agrin	3.43
418177	N44967	Hs.351554	Hs.351554:Homo sapiens cD FLJ32092 fs,	3.42
414888	AL039185	Hs.77558	Hs.77558:thyroid hormone receptor intera	3.42
452445	AB002438	Hs.29596	Hs.29596:Homo sapiens mR from chromosome	3.41
414803	X03100	Hs.914	Hs.914:major histocompatibility complex,	3.41
419201	M22324	Hs.1239	NM_001150:Homo sapiens alanyl (membrane)	3.41
445139	AB037848	Hs.12365	Hs.12365:syptotagmin XIII	3.41
435021	AA922192	Hs.73962	Hs.73962:EphA7	3.41
417259	AW903838	Hs.81800	Hs.81800:chondroitin sulfate proteoglyca	3.40
439737	AI751438	Hs.41271	Hs.41271:Homo sapiens mR full length ins	3.39
410636	AA088177	Hs.172870	Hs.172870:KIAA1913 protein	3.39
431590	AB037789	Hs.263395	Hs.263395:sema domain, transmembrane dom	3.38
415000	AW025529	Hs.239812	Hs.239812:serologically defined breast c	3.36
416700	AW489958	Hs.343475	NM_001909:Homo sapiens cathepsin D (lyso	3.36
440516	S42303	Hs.161	NM_001792:Homo sapiens cadherin 2, type	3.35
423720	AL044191	Hs.23388	Hs.23388:hypothetical protein DKFZp434F0	3.32

421902	BE392717		BE392717:601307571F1 NIH_MGC_44 Homo sap	3.32
409220	BE243323	Hs.51233	Hs.51233:tumor necrosis factor receptor	3.32
421502	AF111856	Hs.105039	NM_006424:Homo sapiens solute carrier fa	3.32
416729	U46165	Hs.1027	NM_004165:Homo sapiens Ras-related assoc	3.30
430302	AL137502	Hs.238679	Hs.238679:Rag D protein	3.30
445084	H38914	Hs.250848	Hs.250848:Homo sapiens cD FLJ14761 ts,	3.29
406825	AJ982529	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	3.29
446272	BE268912	Hs.14601	NM_005335:Homo sapiens hematopoietic cel	3.28
437145	AF007216	Hs.5462	NM_003759:Homo sapiens solute carrier fa	3.27
444071	AJ627808	Hs.110524	Hs.110524:ESTs	3.27
414662	AL036058	Hs.76807	Hs.76807:major histocompatibility comple	3.27
436576	AJ458213	Hs.77542	Hs.77542:ESTs, Weakly similar to S26650	3.26
424675	NM_005512	Hs.151641	NM_005512:Homo sapiens glycoprotein A re	3.25
437897	AA770561	Hs.146170	Hs.146170:hypothetical protein FLJ22969	3.25
449703	H61001	Hs.171802	Hs.171802:Homo sapiens, clone IMAGE:3956	3.25
414788	X78342	Hs.77313	NM_003674:Homo sapiens cyclin-dependent	3.25
414249	AJ797994	Hs.279929	Hs.279929:gp25L2 protein	3.24
430396	D49742	Hs.241363	NM_004132:Homo sapiens hyaluron binding	3.23
424456	AA341017	Hs.25549	Hs.25549:hypothetical protein FLJ20898	3.23
452303	R27257	Hs.57734	Hs.57734:G protein-coupled receptor like	3.22
425390	AJ092634	Hs.156114	NM_004648:Homo sapiens protein tyrosine	3.21
416033	NM_012201	Hs.78979	NM_012201:Homo sapiens golgi apparatus p	3.19
450931	N25156	Hs.25648	Hs.25648:tumor necrosis factor receptor	3.19
428065	AJ634046	Hs.157313	Hs.157313:ESTs	3.18
422616	BE300330	Hs.118725	NM_012248:Homo sapiens selenophosphate s	3.18
439318	AW837048	Hs.6527	Hs.6527:G protein-coupled receptor 56	3.17
427640	AF058293	Hs.180015	NM_001355:Homo sapiens D-dopachrome taut	3.17
409936	AK001691	Hs.57655	Hs.57655:dudulin 2	3.16
435001	AW903849	Hs.173840	Hs.173840:similar to endothelial cell-se	3.16
451154	AA015879	Hs.33536	Hs.33536:ESTs	3.16
420256	U84722	Hs.76206	NM_001795:Homo sapiens cadherin 5, type	3.16
407584	W25945	Hs.8173	Hs.8173:hypothetical protein FLJ10803	3.15
428593	AW207440	Hs.185973	NM_003676:Homo sapiens degenerative sper	3.15
410026	AJ912061	Hs.55016	Hs.55016:EPS8-related protein 2	3.15
445333	BE537641	Hs.44278	Hs.44278:RAB17, member RAS oncogene fami	3.14
448143	AF039704	Hs.20478	NM_000391:Homo sapiens ceroid-lipofuscin	3.14
423007	AA320134	Hs.196029	Hs.196029:Homo sapiens mR for KIAA1657 p	3.14
416511	NM_006762	Hs.79356	NM_006762:Homo sapiens Lysosomal-associa	3.14
439237	AW408158	Hs.318893	Hs.318893:ESTs, Weakly similar to Z185_H	3.13
446899	NM_005397	Hs.16426	NM_005397:Homo sapiens podocalyxin-like	3.13
413916	N49813	Hs.75615	NM_000483:Homo sapiens apolipoprotein C-	3.13
434398	AA121098	Hs.3838	NM_006622:Homo sapiens serum-inducible k	3.12
441283	AA927670	Hs.131704	Hs.131704:ESTs	3.12
418945	BE246762	Hs.89499	NM_000698:Homo sapiens arachidate 5-lipo	3.12
418458	AA332941	Hs.85226	NM_000235:Homo sapiens lipase A, lysosom	3.12
409899	AW361666	Hs.49500	Hs.49500:KIAA0746 protein	3.11
436906	H95990	Hs.181244	Hs.181244:major histocompatibility compl	3.11
411089	AA456454	Hs.355702	Hs.355702:ESTs, Weakly similar to AC0048	3.11
432990	AL036071	Hs.279899	NM_003820:Homo sapiens tumor necrosis fa	3.11
425009	X58288	Hs.154151	NM_002845:Homo sapiens protein tyrosine	3.10
443601	AJ078554	Hs.42658	Hs.42658:Homo sapiens cD FLJ30167 ts, c	3.10
430603	AA148164	Hs.247280	Hs.247280:chromosome 20 open reading fra	3.10
413672	BE156536	Hs.353632	Hs.353632:ESTs, Moderately similar to hy	3.09
407788	AA687538	Hs.38972	NM_005727:Homo sapiens tetraspan 1 (TSPA	3.09
414586	AA306160	Hs.16488	NM_002298:Homo sapiens lymphocyte cytosol	3.08
423712	W46802	Hs.81988	Hs.81988:disabled homolog 2, mitogen-res	3.08
438552	AJ245820	Hs.6314	NM_012410:Homo sapiens type I transmembr	3.06
448364	T08958	Hs.297214	Hs.297214:HSPC141 protein	3.06
426437	BE076537	Hs.169896	NM_004223:Homo sapiens ubiquitin-conjuga	3.06
437679	NM_014214	Hs.5753	NM_014214:Homo sapiens inositol(myo)-1(o	3.06
422262	AL022315	Hs.113987	NM_006498:Homo sapiens lectin, galactosi	3.06
410480	R97457	Hs.63984	NM_001257:Homo sapiens cadherin 13, H-ca	3.05
435818	AA700553	Hs.368614	Hs.368614:ESTs	3.05
418883	BE387036	Hs.1211	NM_001611:Homo sapiens acid phosphatase	3.05
453613	F06838	Hs.374476	Hs.374476:ESTs	3.05
408051	AJ823351	Hs.172148	Hs.172148:ESTs	3.05
432278	AL137506	Hs.274256	Hs.274256:hypothetical protein FLJ23563	3.04
407949	W21874	Hs.247057	Hs.247057:ESTs, Weakly similar to 210926	3.04
418090	U57059	Hs.83429	NM_003810:Homo sapiens tumor necrosis fa	3.04
433165	AA578904	Hs.292437	Hs.292437:ESTs	3.03
425809	AA370362	Hs.57958	Hs.57958:EGF-TM7-tatrophilin-related pro	3.03
443884	N20617	Hs.194397	Hs.194397:ESTs, Moderately similar to 22	3.03
447831	AJ433293	Hs.164115	Hs.164115:ESTs	3.02
413278	BE563085	Hs.833	NM_005101:Homo sapiens Interferon-stimul	3.01
418870	AF147204	Hs.89414	Hs.89414:chemokine (C-X-C motif), recept	3.00
456376	AA683904	Hs.89862	Hs.89862:TNFRSF1A-associated via death d	3.00
439738	BE246502	Hs.9598	Hs.9598:sema domain, immunoglobulin doma	3.00
444416	AW288085	Hs.11156	NM_016494:Homo sapiens hypothetical prot	3.00
406656	M16714	Hs.89643	Hs.89643:transketolase (Wernicke-Korsako	3.00
406826	AW516005	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	2.99
418707	U97502	Hs.87497	Hs.87497:butyrophilin, subfamily 3, memb	2.99
421742	AW970004	Hs.107528	NM_016108:Homo sapiens androgen induced	2.99
406824	AW515961	Hs.84298	Hs.84298:CD74 antigen (invariant polypep	2.99

5	435605	AF151815	Hs.4973	NM_015680:Homo sapiens hypothetical prot	2.98
	410491	AA465131	Hs.64001	Hs.64001:Homo sapiens clone 25218 mR seq	2.98
	427648	AJ376722	Hs.180062	NM_004159:Homo sapiens proteasome (proso	2.98
	411125	AA151647	Hs.68877	NM_000101:Homo sapiens cytochrome b-245,	2.98
	435550	AI224456	Hs.324507	Hs.324507:hypothetical protein FLJ20586	2.98
	429373	NM_014694	Hs.200594	NM_014694:Homo sapiens KIAA0605 gene pro	2.98
	445701	AF065581	Hs.13131	NM_005475:Homo sapiens lymphocyte adapto	2.97
	414649	AI672727	Hs.76753	NM_000118:Homo sapiens endoglin (Osler-R	2.97
	444207	AI565004	Hs.374415	Hs.374415:ESTs	2.97
10	423225	AA852604	Hs.125359	NM_006288:Homo sapiens Thy-1 cell surfac	2.97
	407792	AJ077715	Hs.39384	NM_014344:Homo sapiens four jointed box	2.97
	445707	AJ248720	Hs.114390	Hs.114390:ESTs	2.96
	452888	AW955454	Hs.30942	NM_004093:Homo sapiens ephrin-B2 (EFNB2)	2.96
	418478	U38945	Hs.1174	Hs.1174:cyclin-dependent kinase inhibitor	2.95
15	411441	AL042355	Hs.70202	Hs.70202:WD repeat domain 10	2.95
	443426	AF098158	Hs.9329	Hs.9329:chromosome 20 open reading frame	2.94
	450876	AF189062	Hs.285976	Hs.285976:LAG1 longevity assurance homol	2.94
	426359	AA376409	Hs.10862	Hs.10862:Homo sapiens cD: FLJ23313 fs.	2.94
20	425421	L11669	Hs.157145	NM_001120:Homo sapiens tetracycline tran	2.93
	449879	HO3573	Hs.287830	Hs.287830:Homo sapiens mR: cD DKFZp434E1	2.93
	454075	RA3826	Hs.16313	Hs.16313:Kruppel-like zinc finger protei	2.93
	421595	AB014520	Hs.301685	Hs.301685:KIAA0620 protein	2.93
	457949	W69171	Hs.334814	Hs.334814:hypothetical protein FLJ14868	2.92
25	443987	AW163123	Hs.10071	NM_016551:Homo sapiens seven transmembra	2.92
	420259	BE550182	Hs.375142	Hs.375142:RafGEF-like protein 3, mouse h	2.92
	415906	AJ751357	Hs.288741	Hs.288741:Homo sapiens cD: FLJ22256 fs.	2.91
	429762	AI346255	Hs.216354	NM_006913:Homo sapiens ring finger prote	2.91
	451527	AF022813	Hs.26518	NM_003271:Homo sapiens transmembrane 4 s	2.91
30	425356	BE244879	Hs.155939	NM_005541:Homo sapiens inositol polyphos	2.91
	427080	AW068287	Hs.301175	NM_002872:Homo sapiens ras-related C3 bo	2.91
	426432	AF001601	Hs.169857	NM_000305:Homo sapiens paraoxase 2 (PON2	2.90
	431476	BE612705	Hs.256697	Hs.256697:histidine triad nucleotide bin	2.89
	406659	AA663985	Hs.277477	Hs.277477:major histocompatibility compl	2.89
35	451144	AW956103	Hs.61712	Hs.61712:Homo sapiens cD FLJ31548 fs. c	2.89
	456362	AW973003	Hs.179909	Hs.179909:nuclear receptor coactivator 6	2.88
	426440	BE382756	Hs.169902	NM_006516:Homo sapiens solute carrier fa	2.88
	456974	M12529	Hs.169401	NM_000041:Homo sapiens apolipoprotein E	2.88
	418174	L20688	Hs.83656	Hs.83656:Rho GDP dissociation inhibitor	2.88
40	446055	AI815381	Hs.12909	Hs.12909:mucoitin 1	2.88
	423184	NM_004428	Hs.1624	NM_004428:Homo sapiens ephrin-A1 (EF1),	2.87
	427700	AA262294	Hs.180383	NM_001946:Homo sapiens dual specificity	2.87
	410668	BE379794	Hs.159651	NM_016629:Homo sapiens hypothetical prot	2.87
	444143	AW747996	Hs.160999	Hs.160999:ESTs, Weakly similar to I78885	2.87
45	407151	H25836	Hs.301527	Hs.301527:ESTs, Moderately similar to un	2.86
	449349	AI825386	Hs.352579	Hs.352579:Homo sapiens, chromosome 20 op	2.86
	436997	AA741151	Hs.137323	Hs.137323:ESTs	2.86
	446143	BE245342	Hs.306079	NM_013336:Homo sapiens protein transport	2.86
50	417355	D13168	Hs.82002	Hs.82002:endothelin receptor type B	2.86
	431685	AW296135	Hs.267659	NM_006113:Homo sapiens vav 3 oncogene (V	2.86
	408877	AA479033	Hs.130315	Hs.130315:ESTs	2.85
	429615	AF258627	Hs.211562	NM_005502:Homo sapiens ATP-binding casse	2.85
	412014	AI620650	Hs.43761	Hs.43761:gap junction protein, alpha 7,	2.84
	438749	AA584890	Hs.5302	NM_006149:Homo sapiens lectin, galactosi	2.84
55	419825	U91616	Hs.182885	NM_004556:Homo sapiens nuclear factor of	2.84
	439941	AI392640	Hs.18272	Hs.18272:solute carrier family 38, membe	2.84
	435496	AA281959	Hs.5210	NM_004677:Homo sapiens glia maturation f	2.84
	422100	AI096988	Hs.111554	NM_005737:Homo sapiens ADP-ribosylation	2.83
	439730	AF035292	Hs.6654	Hs.6654:KIAA0657 protein	2.83
60	447217	BE465754	Hs.17778	NM_003872:Homo sapiens neuropilin 2 (NRP	2.83
	428343	AL043021	Hs.12705	Hs.12705:similar to HYPOTHETICAL 43.1 KD	2.82
	440524	R71264	Hs.16798	Hs.16798:Homo sapiens mR: cD DKFZp564O24	2.82
	415523	AL042003	Hs.296847	NM_003119:Homo sapiens spastic paraplegi	2.81
	439668	AI091277	Hs.302634	Hs.302634:frizzled homolog 8 (Drosophila	2.81
65	414570	Y00285	Hs.75473	NM_000876:Homo sapiens insulin-like grow	2.80
	426535	AU077012	Hs.288582	NM_008287:Homo sapiens tissue factor pat	2.80
	409649	AA159216	Hs.55505	Hs.55505:hypothetical protein FLJ20442	2.80
	406655	M21533	Hs.277477	Hs.277477:major histocompatibility compl	2.79
	415323	BE269352	Hs.949	NM_000433:Homo sapiens neutrophil cytooso	2.79
70	443195	BE148235	Hs.193063	Hs.193063:Homo sapiens cD FLJ14201 fs.	2.78
	451356	AA748418	Hs.164577	Hs.164577:ESTs	2.78
	450708	AA376654	Hs.350065	Hs.350065:Homo sapiens cD FLJ30634 fs.	2.78
	433681	AI004377	Hs.200360	Hs.200360:Homo sapiens cD FLJ13027 fs.	2.77
	442599	AF078037	Hs.324051	NM_006663:Homo sapiens RelA-associated i	2.76
75	414509	AW161311	Hs.76294	NM_001780:Homo sapiens CD63 antigen (met	2.76
	431394	AK000692	Hs.252351	Hs.252351:HERV-H LTR-associating 2	2.76
	417331	AW411297	Hs.81972	Hs.81972:SHC (Src homology 2 domain cont	2.76
	415995	NM_004573	Hs.355888	NM_004573:Homo sapiens phospholipase C,	2.75
	414911	NM_000107	Hs.77602	NM_000107:Homo sapiens damage-specific D	2.75
80	425976	C75094	Hs.334514	Hs.334514:chromosome 6 open reading fram	2.75
	407893	BE408359	Hs.43621	Hs.43621:hypothetical protein MBC3205	2.75
	407903	AI287341	Hs.154029	Hs.154029:bHLH factor Hes4	2.75
	416082	AA724811	Hs.334791	Hs.334791:similar to neurol tetraspanin	2.75
	428494	AA233439	Hs.184634	Hs.184634:hypothetical protein FLJ20005	2.75

421506	BE302796	Hs.105097	NM_003258:Homo sapiens thymidine kise 1,	2.74
427581	NM_014788	Hs.179703	NM_014788:Homo sapiens tripartite molif-	2.74
424527	AW138558	Hs.334873	Hs.334873:carboxypeptidase M	2.74
439578	AW263124	Hs.350547	Hs.350547:nuclear receptor co-repressor/	2.74
425188	AK002052	Hs.155071	Hs.155071:chromosome 20 open reading fra	2.74
428013	AF151020	Hs.181444	NM_016456:Homo sapiens hypothetical prot	2.73
439333	AW384710	Hs.132986	Hs.132986:Homo sapiens cD FLJ31588 fts,	2.73
450935	BE514743	Hs.355753	NM_005851:Homo sapiens tumor suppressor	2.73
421532	AW138207	Hs.146170	Hs.146170:hypothetical protein FLJ22969	2.73
440502	AI824113	Hs.78281	Hs.78281:regulator of G-protein sigling	2.73
444981	AW855398	Hs.12210	Hs.12210:tumor endothelial marker 6	2.72
439219	N33883	Hs.41322	Hs.41322:ESTs	2.72
416847	L43821	Hs.80261	NM_006403:Homo sapiens enhancer of flam	2.72
433179	AW362945	Hs.162459	Hs.162459:ESTs	2.72
44528	AW073971	Hs.238954	Hs.238954:ESTs, Weakly similar to putati	2.71
411213	AA676939	Hs.69285	NM_003873:Homo sapiens neuropilin 1 (NRP	2.70
433012	NM_004045	Hs.279910	NM_004045:Homo sapiens ATX1 antioxidant	2.70
425345	AU077297	Hs.155894	NM_002827:Homo sapiens protein tyrosine	2.69
428923	BE047698	Hs.188785	Hs.188785:ESTs	2.69
427923	AW274357	Hs.301408	Hs.301406:hypothetical protein PP3501	2.69
446644	NM_003272	Hs.15791	NM_003272:Homo sapiens transmembrane 7 s	2.69
421743	T35958	Hs.107614	Hs.107614:DKFZP5641171 protein	2.68
416207	NM_014745	Hs.79077	NM_014745:Homo sapiens KIAA0233 gene pro	2.68
420372	AW960049	Hs.293660	Hs.293660:gene overexpressed in astrocyt	2.68
420542	NM_000505	Hs.1321	NM_000505:Homo sapiens coagulation facto	2.67
425069	AA687465	Hs.298184	Hs.298184:potassium voltage-gated channe	2.67
418558	AW082266	Hs.86131	NM_003824:Homo sapiens Fas (TNFRSF6)-ass	2.67
426251	M24283	Hs.168383	NM_000201:Homo sapiens intercellular adh	2.66
406701	AA780613	Hs.62954	Hs.62954:teritin, heavy polypeptide 1	2.66
416681	AK000378	Hs.267566	Hs.267566:hypothetical protein FLJ20371	2.66
412833	AW960547	Hs.298262	Hs.298262:ribosomal protein S19	2.66
433101	AW572317	Hs.12082	Hs.12082:TIGA1	2.66
414774	X02419	Hs.77274	NM_002658:Homo sapiens plasminogen activ	2.66
427858	AI360119.comp	Hs.181013	NM_002629:Homo sapiens phosphoglycerate	2.66
413929	BE501689	Hs.75617	Hs.75617:collagen, type IV, alpha 2	2.66
424762	AL119442	Hs.183684	Hs.183684:eukaryotic translation initiat	2.66
422048	NM_012445	Hs.288126	NM_012445:Homo sapiens spondin 2, extrac	2.65
413350	AI192528	Hs.164537	Hs.164537:ESTs	2.65
450184	W31096	Hs.237617	Hs.237617:dipeptidylpeptidase 9	2.65
419285	D31887	Hs.89868	Hs.89868:KIAA0062 protein	2.65
414217	AI309298	Hs.279898	Hs.279898:Homo sapiens cD: FLJ23165 fts,	2.64
451253	H48299	Hs.26126	NM_006984:Homo sapiens claudin 10 (CLDN1	2.64
435905	AW997484	Hs.5003	Hs.5003:SLIT-ROBO Rho GTPase-activating	2.64
432581	AU076465	Hs.278441	NM_014634:Homo sapiens KIAA0015 gene pro	2.63
415782	AA169345	Hs.123177	Hs.123177:hypothetical protein BC011406	2.63
430223	NM_002514	Hs.235935	NM_002514:Homo sapiens nephroblastoma ov	2.63
417526	AA568906	Hs.82240	NM_004177:Homo sapiens syntaxin 3A (STX3	2.63
409956	AW103364	Hs.727	NM_002192:Homo sapiens inhibin, beta A (	2.63
449843	R85337	Hs.24030	NM_001860:Homo sapiens solute carrier fa	2.62
417389	BE260964	Hs.82045	NM_002391:Homo sapiens midline (neurite	2.62
446312	BE087853	Hs.171802	Hs.171802:Homo sapiens, clone IMAGE:3956	2.62
435099	AC004770	Hs.4756	Hs.4756:flap structure-specific endonuci	2.62
417920	S47833	Hs.82927	NM_004037:Homo sapiens adenosine monopho	2.62
435702	AI033647	Hs.121001	Hs.121001:Homo sapiens, clone MGC:4552 I	2.62
422959	AV647015	Hs.349256	Hs.349256:paired immunoglobulin-like rec	2.62
419938	AU076772	Hs.1279	NM_001733:Homo sapiens complement compon	2.62
450954	AI904740	Hs.25691	NM_005856:Homo sapiens receptor (calcio	2.61
421753	BE314828	Hs.107911	Hs.107911:ATP-binding cassette, sub-famI	2.61
443577	AI078033	Hs.177170	Hs.177170:ESTs, Weakly similar to ALU8_H	2.61
453886	R86282	Hs.20247	Hs.20247:ESTs	2.61
421883	X55079	Hs.1437	NM_000152:Homo sapiens glucosidase, alph	2.60
440457	BE387593	Hs.21321	Hs.21321:granule cell differentiation pr	2.60
410295	AA741357	Hs.356624	Hs.356624:ESTs	2.59
420879	X57152	Hs.99853	NM_001436:Homo sapiens fibrin(ogen) (FBL)	2.59
451558	NM_001089	Hs.26630	NM_001089:Homo sapiens ATP-binding casse	2.59
444672	Z95636	Hs.11669	Hs.11669:laminin, alpha 5	2.59
408669	AI493591	Hs.78146	Hs.78146:platelet/endothelial cell adhes	2.59
426194	T50872	Hs.2001	Hs.2001:thromboxane A synthase 1 (platelet	2.59
421814	L12350	Hs.108623	NM_003247:Homo sapiens thrombospondin 2	2.59
456371	S76825	Hs.89695	Hs.89695:insulin receptor	2.59
429098	AF030249	Hs.196176	NM_001398:Homo sapiens enoyl Coenzyme A	2.59
414443	AU077268	Hs.76144	NM_002609:Homo sapiens platelet-derived	2.59
428484	AF104032	Hs.184601	NM_003486:Homo sapiens solute carrier fa	2.59
453309	AI791809	Hs.32949	NM_005218:Homo sapiens defensin, beta 1	2.59
412867	AU076861	Hs.74637	NM_003217:Homo sapiens testis enhanced g	2.58
432827	Z68128	Hs.3109	Hs.3109:Rho GTPase activating protein 4	2.58
412669	AW880841	Hs.96908	NM_006034:Homo sapiens p53-induced prote	2.58
412115	AK001783	Hs.73239	Hs.73239:hypothetical protein FLJ10901	2.58
452866	R26969	Hs.268016	Hs.268016:Homo sapiens cD: FLJ21243 fts,	2.58
435129	AI381659	Hs.267086	Hs.267086:ESTs	2.57
424482	BE268621	Hs.149155	NM_003374:Homo sapiens voltage-dependent	2.57
410494	M36584	Hs.64016	NM_000313:Homo sapiens protein S (alpha)	2.56
433895	AI287912	Hs.3628	NM_004834:Homo sapiens mitogen-activated	2.56

	442566	R37337	Hs.12111	Hs.12111:ESTs	2.56
	417640	D30857	Hs.82353	NM_006404:Homo sapiens protein C recepto	2.56
	442622	NM_000435	Hs.8546	NM_000435:Homo sapiens Notch homolog 3 (	2.56
5	430346	AK000331	Hs.297641	Hs.297641:retinoblastoma-associated fact	2.55
	419344	U94905	Hs.277445	Hs.277445:diacylglycerol kinase, zeta (104	2.55
	426500	NM_014638	Hs.170156	NM_014638:Homo sapiens KIAA0450 gene pro	2.55
	408048	NM_007203	Hs.42322	NM_007203:Homo sapiens A kinase (PRKA) anc	2.55
	450700	AW732799	Hs.25348	NM_005860:Homo sapiens follistatin-like	2.54
10	417018	M16038	Hs.80887	NM_002350:Homo sapiens v-src-1 Yamaguchi	2.54
	419378	R24922	Hs.90078	Hs.90078:nucleoside-sugar transporter si	2.54
	422451	AA310753	Hs.42491	Hs.42491:ESTs, Moderately similar to hyp	2.53
	435906	A1686379	Hs.110796	Hs.110796:SAR1 protein	2.53
	400231				2.53
15	417849	AW291587	Hs.82733	NM_007361:Homo sapiens nidogen 2 (NID2),	2.53
	427380	NM_005534	Hs.177559	NM_005534:Homo sapiens interferon gamma	2.52
	426385	AF112213	Hs.184062	Hs.184062:chromosome 20 open reading fra	2.52
	438000	A1825880	Hs.5985	Hs.5985:non-kinase Cdc42 effector protein	2.52
	448719	AA033827	Hs.21858	Hs.21858:serine (or cysteine) protease i	2.52
20	422396	W21872	Hs.7907	Hs.7907:L-fucose kinase	2.52
	420787	AA564248	Hs.351292	Hs.351292:Homo sapiens cD FLJ32605 fis,	2.51
	430590	AW383947	Hs.246381	NM_001251:Homo sapiens CD68 antigen (CD6	2.51
	447026	BE313144	Hs.324844	Hs.324844:hypothetical protein IMAGE3455	2.51
	439223	AW238299	Hs.250618	Hs.250618:UL16 binding protein 2	2.50
25	435151	AA348482	Hs.4788	Hs.4788:nicestrin	2.50
	448202	AB002292	Hs.20695	NM_014829:Homo sapiens Rho guanine nucle	2.50
	449943	AF104266	Hs.24212	Hs.24212:latrophilin	2.50
	425743	BE396495	Hs.159428	Hs.159428:BCL2-associated X protein	2.50
	444681	AJ243937	Hs.288316	Hs.288316:chromosome 6 open reading fram	2.50
30	421643	BE281170	Hs.106357	NM_007126:Homo sapiens valosin-containing	2.50
	426855	D63476	Hs.172813	NM_003899:Homo sapiens Rho guanine nucle	2.50
	432306	Y18207	Hs.303090	NM_005398:Homo sapiens protein phosphata	2.49
	421846	AA017707	Hs.1432	NM_002743:Homo sapiens protein kinase C su	2.49
	421905	A1660247	Hs.32699	Hs.32699:Homo sapiens, Similar to RIKEN	2.49
35	419493	AF001212	Hs.90744	NM_002815:Homo sapiens proteasome (proso	2.49
	422530	AW972300	Hs.118110	NM_004335:Homo sapiens bone marrow strom	2.48
	442821	BE391929	Hs.8752	NM_014255:Homo sapiens transmembrane pro	2.48
	416919	T97839	Hs.80464	NM_006402:Homo sapiens hepatitis B virus	2.48
	443105	X96753	Hs.9004	NM_001897:Homo sapiens chondroitin sulfat	2.48
40	430040	AW503115	Hs.227823	NM_014287:Homo sapiens pM5 protein (PM5)	2.48
	428028	U52112	Hs.182018	NM_001569:Homo sapiens interleukin-1 rec	2.47
	424307	AW293399	Hs.356377	Hs.356377:Homo sapiens, clone IMAGE:3633	2.46
	434511	R28982	Hs.18106	Hs.18106:ESTs, Weakly similar to T06291	2.46
	454390	AB020713	Hs.56966	Hs.56966:KIAA0906 protein	2.46
45	417785	X59812	Hs.82568	NM_000784:Homo sapiens cytochrome P450,	2.46
	424673	AA345051	Hs.294092	Hs.294092:Homo sapiens miR full length in	2.46
	422003	AA361760	Hs.296326	Hs.296326:ESTs, Weakly similar to A33533	2.46
	432126	AA865239	Hs.37196	Hs.37196:putative G protein coupled rece	2.46
	445937	A1452943	Hs.321231	NM_003779:Homo sapiens UDP-Gal:betaGlc	2.46
50	409354	N68188	Hs.159472	Hs.159472:Homo sapiens cD: FLJ22224 fis,	2.46
	401179				2.46
	418151	AA864238.comp	Hs.83583	NM_005731:Homo sapiens actin related pro	2.45
	422648	D86983	Hs.118893	Hs.118893:Melanoma associated gene	2.45
	427759	BE245578	Hs.2200	NM_005041:Homo sapiens perforin 1 (prefo	2.45
55	431222	X56777	Hs.273790	NM_007155:Homo sapiens zo pellucida glyco	2.45
	411529	AA430348	Hs.317596	Hs.317596:Homo sapiens cD FLJ12927 fis,	2.45
	426825	AL133415	Hs.297753	NM_003380:Homo sapiens vimentin (VIM), m	2.45
	422242	AJ251760	Hs.273385	NM_016592:Homo sapiens GS complex locus	2.45
	408105	AW152207	Hs.270977	Hs.270977:ESTs	2.44
60	426410	BE298446	Hs.305890	Hs.305890:BCL2-like 1	2.44
	421084	AJ245432	Hs.101382	NM_006291:Homo sapiens tumor necrosis fa	2.44
	428157	AJ738719	Hs.198427	NM_000189:Homo sapiens hexokinase 2 (HK2),	2.44
	424398	BE397787	Hs.146393	NM_014685:Homo sapiens homocysteine-indu	2.44
	424825	AF207059	Hs.153357	NM_001084:Homo sapiens procollagen-lysine	2.44
65	426031	AA295251	Hs.160066	Hs.160066:cisplatin resistance associate	2.43
	409817	BE295464	Hs.56807	Hs.56807:Williams-Beuren syndrome chromo	2.43
	429359	W00482	Hs.2398	NM_004995:Homo sapiens matrix metallopro	2.43
	426781	AJ015709	Hs.172089	Hs.172089:pro-oncogene receptor inducing	2.43
	429332	AF030403	Hs.199263	NM_013233:Homo sapiens serine threonine	2.43
70	425923	NM_005026	Hs.162808	NM_005026:Homo sapiens phosphoinositide-	2.43
	432211	BE274530	Hs.273333	Hs.273333:hypothetical protein FLJ10986	2.43
	433339	AF019226	Hs.8036	Hs.8036:RAB3D, member RAS oncogene fami	2.42
	420539	AA282735	Hs.44004	Hs.44004:AD031 protein	2.42
	413243	AA769266	Hs.193657	Hs.193657:ESTs	2.42
75	435029	AF187706	Hs.19280	Hs.19280:cysteine-rich motor neuron 1	2.42
	422374	AW732869	Hs.1519	Hs.1519:protein kinase, cAMP-dependent, re	2.42
	444501	AW247624	Hs.11342	NM_004148:Homo sapiens ninjurin 1 (NINJ1	2.42
	414919	AW087337	Hs.194461	Hs.194461:ESTs	2.42
	419355	AA428520	Hs.90061	NM_006667:Homo sapiens progesterone rece	2.42
80	436042	AF284422	Hs.119178	Hs.119178:cation-chloride cotransporter-	2.42
	418245	AA088767	Hs.83883	Hs.83883:transmembrane, prostate androge	2.42
	444215	AB033075	Hs.10669	Hs.10669:development and differentiation	2.41
	408683	R58665	Hs.46847	NM_016614:Homo sapiens TRAF and TNF rece	2.41
	423701	AA329856	Hs.143022	Hs.143022:ESTs	2.41



	441783	BE313412	Hs.7961	Hs.7961:Homo sapiens clone 25012 mR sequ	2.41
	428072	BE258602	Hs.182368	NM_016292:Homo sapiens heat shock protel	2.41
	434599	AB002313	Hs.3989	Hs.3989:plexin B2	2.40
5	442351	W52642	Hs.8261	Hs.8261:SPRY domain-containing SOCS box	2.40
	407894	AJ278313	Hs.41143	Hs.41143:phospholipase C, beta 1 (phosph	2.40
	453449	W16752	Hs.32981	Hs.32981:sema domain, immunoglobulin dom	2.40
	406688	AI634522	Hs.152925	Hs.152925:KIAA1268 protein	2.40
	422448	AW372922	Hs.116774	Hs.116774:integrin, alpha 1	2.39
	416269	AA177138	Hs.161671	Hs.161671:ESTs	2.39
10	452679	Z42387	Hs.83883	Hs.83883:transmembrane, prostate androge	2.38
	432981	NM_002733	Hs.3136	NM_002733:Homo sapiens protein kinase, AMP	2.38
	419846	NM_015977	Hs.285681	Hs.285681:Williams Beuren syndrome chrom	2.38
	422110	AJ376738	Hs.111779	Hs.111779:secreted protein, acidic, cyst	2.38
	413092	AA126856	Hs.118665	Hs.118665:ESTs	2.38
15	433969	AW207279	Hs.271786	Hs.271786:ESTs, Weakly similar to PCA395	2.37
	451267	AJ038894	Hs.117865	Hs.117865:solute carrier family 17 (anion)	2.37
	447526	AL048753	Hs.303849	NM_002982:Homo sapiens small inducible c	2.37
	441623	AA315805	Hs.348710	Hs.348710:Homo sapiens, clone IMAGE:4242	2.37
20	420255	NM_007289	Hs.1298	NM_007289:Homo sapiens membrane metallo-	2.37
	409274	NM_003930	Hs.52644	NM_003930:Homo sapiens src family associ	2.36
	422801	AF125672	Hs.287994	Hs.287994:nuclear receptor co-repressor	2.36
	407887	AA579668	Hs.41072	Hs.41072:serine (or cysteine) protease 1	2.36
	408212	AA297567	Hs.43728	NM_015696:Homo sapiens weakly similar to	2.36
25	430478	NM_014349	Hs.241535	NM_014349:Homo sapiens apolipoprotein L	2.36
	405102				2.35
	423583	AL122055	Hs.129838	Hs.129838:KIAA1028 protein	2.35
	426125	X87241	Hs.166994	NM_005245:Homo sapiens FAT tumor suppress	2.35
	425204	NM_002436	Hs.1861	NM_002436:Homo sapiens membrane protein,	2.35
30	420676	AA434780	Hs.4248	Hs.4248:Homo sapiens PP3781 mR, complete	2.35
	421079	AW404994	Hs.101695	Hs.101695:NCK adaptor protein 2	2.35
	410039	AF207989	Hs.58014	Hs.58014:G protein-coupled receptor, fam	2.34
	412958	BE391579	Hs.75087	NM_006712:Homo sapiens FAST kinase (FASTK)	2.34
	430363	M28713	Hs.274464	NM_000398:Homo sapiens diaphorase (DH) (	2.34
	425397	J04088	Hs.156346	NM_001067:Homo sapiens topoisomerase (D)	2.34
35	451035	AU076785	Hs.430	NM_002670:Homo sapiens platin 1 (p1)	2.34
	449027	AJ271216	Hs.22880	Hs.22880:dipeptidylpeptidase III	2.34
	429457	BE243065	Hs.202955	Hs.202955:hypothetical protein FLJ20507	2.34
	417709	D87434	Hs.82426	NM_014734:Homo sapiens KIAA0247 gene pro	2.34
40	412805	AW954569	Hs.278675	Hs.278675:bromodomain-containing 4	2.34
	427647	W19744	Hs.180059	Hs.180059:Homo sapiens cD FLJ1360 fts,	2.34
	430702	U56979	Hs.278568	NM_000186:Homo sapiens H factor 1 (comp)	2.33
	456804	AI421845	Hs.139851	NM_001233:Homo sapiens caveolin 2 (CAV2)	2.33
	453648	W21493	Hs.28329	Hs.28329:protein phosphatase 1, regulato	2.33
45	450812	AB002360	Hs.25515	Hs.25515:MCF-2 cell line derived transfo	2.33
	402575				2.33
	424670	W61215	Hs.116651	NM_005797:Homo sapiens epithelial V-like	2.32
	452960	AK001336	Hs.31137	NM_006504:Homo sapiens protein tyrosine	2.32
	442968	AK000606	Hs.8868	NM_004871:Homo sapiens golgi SP receptor	2.32
50	410639	BE269047	Hs.65234	Hs.65234:DEAD/H (Asp-Glu-Ala-Asp/His) bo	2.32
	415169	W42913	Hs.78089	NM_004231:Homo sapiens ATPase, H+ transp	2.32
	450160	BE048099	Hs.183738	Hs.183738:FERM, RhoGEF (ARHGAP) and p16c	2.32
	407223	H96850		H96850:yo03b12.s1 Soares melanocyte 2Nbh	2.32
	426780	BE242284	Hs.172199	NM_001114:Homo sapiens adenylate cyclase	2.32
55	434987	AW975114	Hs.371677	Hs.371677:ESTs	2.32
	416354	NM_000633	Hs.79241	NM_000633:Homo sapiens B-cell CLL/lympho	2.31
	453107	NM_016113	Hs.279746	NM_016113:Homo sapiens transient recepto	2.31
	422963	M79141	Hs.13234	Hs.13234:ESTs, Weakly similar to hypothe	2.31
	433618	AA602539	Hs.345494	Hs.345494:ESTs, Moderately similar to ZN	2.31
60	438584	AA811347		AA811347:ob81h06.s1 NCI_CGAP_GCB1 Homo s	2.31
	446126	AW085909	Hs.356618	Hs.356618:ESTs, Weakly similar to PCA259	2.31
	408716	AJ567839	Hs.151714	Hs.151714:peroxisomal proliferator-activ	2.30
	433230	AW136134	Hs.220277	Hs.220277:ESTs, Weakly similar to expres	2.30
	410168	AW834050	Hs.351432	Hs.351432:tensin	2.30
65	446342	BE298665	Hs.14846	Hs.14846:Homo sapiens mR: cD DKFZp564D01	2.30
	418452	BE379749	Hs.85201	NM_005127:Homo sapiens C-type (calcium d	2.30
	453175	NM_006834	Hs.32217	NM_006834:Homo sapiens RAB32, member RAS	2.29
	409012	AL117435	Hs.49725	Hs.49725:DKFZP434I218 protein	2.29
	452848	AI417193	Hs.288912	Hs.288912:BBP-like protein 2	2.29
70	418838	AW385224	Hs.35198	Hs.35198:ectonucleotide pyrophosphatase/	2.29
	422562	AJ962060	Hs.118397	NM_001129:Homo sapiens AE binding protei	2.28
	432828	AB042326	Hs.287402	Hs.287402:chondroitin 4-sulfotransferase	2.28
	412948	BE243313	Hs.334851	NM_006148:Homo sapiens LIM and SH3 prote	2.28
	426068	AF029778	Hs.166154	NM_002226:Homo sapiens jagged 2 (JAG2),	2.28
75	456919	NM_003900	Hs.182248	NM_003900:Homo sapiens sequestosome 1 (S	2.28
	452808	AW014549	Hs.58373	Hs.58373:ESTs	2.28
	453983	H94997	Hs.16450	Hs.16450:ESTs	2.28
	407736	N41744	Hs.349326	Hs.349326:Homo sapiens cD FLJ30677 fts,	2.28
	413211	AW967107	Hs.109274	Hs.109274:hypothetical protein MGCA365	2.28
80	422051	AW327548	Hs.111024	Hs.111024:solute carrier family 25 (mito	2.27
	438438	AA257992	Hs.50651	Hs.50651:Janus kinase 1 (a protein tyrosin	2.27
	436278	BE336290	Hs.5097	NM_004710:Homo sapiens syptogyrin 2 (SYN	2.27
	454080	AI199711	Hs.576	NM_000147:Homo sapiens fucosidase, alpha	2.27
	426542	AF190746	Hs.170310	NM_017424:Homo sapiens cat eye syndrome	2.27

	417115	AW952792	Hs.334612	NM_003094:Homo sapiens small nuclear rib	2.27
	402901				2.26
	412898	A1129903	Hs.74669	NM_006634:Homo sapiens vesicle-associate	2.26
	413020	R98736		R98736:yr31h09.r1 Soares fetal liver spl	2.26
5	413939	AL047051	Hs.199961	Hs.199961:ESTs, Weakly similar to hypoth	2.26
	408681	AW953853	Hs.281462	Hs.281462:hypothetical protein FLJ14251	2.25
	412330	NM_005100	Hs.788	NM_005100:Homo sapiens A kinase (PRKA) anc	2.25
	442083	R50192	Hs.165062	Hs.165062:ESTs	2.25
	418271	NM_000919	Hs.83920	NM_000919:Homo sapiens peptidylglycine a	2.25
10	433378	AJ249361	Hs.74122	NM_001225:Homo sapiens caspase 4, apopto	2.25
	438562	AI566826	Hs.25890	Hs.25890:ESTs, Weakly similar to transdu	2.25
	443883	AA114212	Hs.9930	NM_001235:Homo sapiens serine (or cystei	2.25
	416976	BE243985	Hs.80680	Hs.80680:major vault protein	2.24
	416914	AA344481	Hs.80426	Hs.80426:brain and reproductive organ-ex	2.24
15	400288	X06256	Hs.149609	NM_002205:Homo sapiens integrin, alpha 5	2.24
	407904	W44735	Hs.107260	Hs.107260:putative UDP-Glc:polypeptide	2.24
	429690	AW956329	Hs.23721	Hs.23721:ESTs	2.24
	443813	AA876372	Hs.93961	Hs.93961:Homo sapiens mR; cD DKFZp667D09	2.24
	427458	BE208364	Hs.29283	Hs.29283:ESTs, Weakly similar to UOUH pr	2.24
20	454294	AB000734	Hs.50640	NM_003745:Homo sapiens JAK binding prote	2.24
	407192	AA609200	Hs.366318	Hs.366318:ESTs	2.23
	425761	T19239	Hs.1940	NM_001885:Homo sapiens crystallin, alpha	2.23
	456437	AJ924228	Hs.115185	Hs.115185:ESTs	2.23
25	413019	BE281604	Hs.75140	NM_002337:Homo sapiens low density lipop	2.23
	418862	BE550964	Hs.89399	Hs.89399:ATP synthase, H+ transporting,	2.23
	435284	AA879470	Hs.96849	Hs.96849:Homo sapiens cD FLJ11492 fts, c	2.23
	429630	M85289	Hs.211573	NM_005529:Homo sapiens heparan sulfate p	2.23
	427609	AK000436	Hs.179791	Hs.179791:RAB20, member RAS oncogene fam	2.23
30	421917	AB028943	Hs.109445	Hs.109445:hypermethylated in cancer 2	2.23
	446616	R65964	Hs.334873	Hs.334873:carboxypeptidase M	2.23
	407232	X04526		X04526:Human liver mR for beta-subunit s	2.23
	423799	AF047033	Hs.132904	Hs.132904:solute carrier family 4, sodiu	2.23
	446755	AW451473	Hs.16134	NM_005990:Homo sapiens serine/threonine	2.22
35	452865	AJ924046	Hs.119567	Hs.119567:ESTs, Weakly similar to ALU1_H	2.22
	431393	AW971493	Hs.134269	Hs.134269:ESTs, Weakly similar to 200439	2.22
	431890	X17033	Hs.271986	NM_002203:Homo sapiens integrin, alpha 2	2.22
	428782	X12830	Hs.193400	NM_000565:Homo sapiens interleukin 6 rec	2.22
	446006	NM_004403	Hs.13530	NM_004403:Homo sapiens deafness, autosom	2.22
40	436418	AJ245874	Hs.4245	Hs.4245:chromosome 11 hypothetical prote	2.22
	423869	BE409301	Hs.134012	NM_006688:Homo sapiens C1q-related facto	2.21
	437730	AW071087	Hs.239176	Hs.239176:insulin-like growth factor 1 r	2.21
	444020	R92952	Hs.35052	Hs.35052:ESTs	2.21
	413882	AA132973	Hs.184492	Hs.184492:Homo sapiens mR; cD DKFZp667B0	2.21
45	412654	AJ093480	Hs.374319	Hs.374319:ESTs	2.21
	448988	Y09763	Hs.22785	NM_004961:Homo sapiens gamma-aminobutyl	2.21
	426841	AJ052358	Hs.131741	Hs.131741:ESTs	2.21
	408196	AL034548	Hs.43627	NM_006943:Homo sapiens SRY (sex determin	2.21
	451711	AK000481	Hs.26890	Hs.26890:cat eye syndrome chromosome reg	2.20
50	414325	AA251929	Hs.355341	Hs.355341:Homo sapiens, clone IMAGE:3536	2.20
	424512	X53002	Hs.149846	NM_002213:Homo sapiens integrin, beta 5	2.20
	448883	BE614989	Hs.7503	Hs.7503:hypothetical protein FLJ14153	2.20
	411296	BE207307	Hs.10114	Hs.10114:growth suppressor 1	2.20
	452268	NM_003512	Hs.28777	NM_003512:Homo sapiens H2A histone famil	2.20
55	416810	AF035606	Hs.80019	NM_013232:Homo sapiens programmed cell d	2.20
	441415	H21497	Hs.7471	Hs.7471:BSP-like protein 1	2.20
	444212	AW503976	Hs.10649	NM_004848:Homo sapiens basement membrane	2.19
	428044	AA093322	Hs.301404	NM_006743:Homo sapiens R binding motif p	2.19
	430017	AA263172	Hs.35	NM_002832:Homo sapiens protein tyrosine	2.19
60	424490	AJ278016	Hs.55565	Hs.55565:ankyrin repeat domain 3	2.19
	431193	AW749505	Hs.296770	Hs.296770:KAA1719 protein	2.19
	453686	AL110326	Hs.304679	Hs.304679:ESTs, Weakly similar to Z196_H	2.19
	448262	AW880830	Hs.186273	Hs.186273:ESTs	2.19
	416065	BE267931	Hs.78996	NM_002592:Homo sapiens proliferating cel	2.19
65	442045	C05768	Hs.8078	Hs.8078:Homo sapiens clone FBD3 Cri-du-c	2.19
	423804	AW403448	Hs.1706	NM_006084:Homo sapiens interferon-stimul	2.19
	428024	Z29067	Hs.2236	Hs.2236:NIMA (never in mitosis gene a)-r	2.19
	424503	NM_002205	Hs.149609	NM_002205:Homo sapiens integrin, alpha 5	2.19
	437686	Z83844	Hs.5790	Hs.5790:hypothetical protein DJ37E16.5	2.18
	405204				2.18
70	426158	NM_001982	Hs.199067	NM_001982:Homo sapiens v-erb-b2 erythro	2.18
	417418	NM_002458	Hs.82116	NM_002458:Homo sapiens myeloid different	2.18
	412773	H15785	Hs.74573	NM_012268:Homo sapiens similar to vaccin	2.18
	409402	AF208234	Hs.695	NM_000100:Homo sapiens cystatin B (staf	2.18
75	443791	N64456	Hs.143345	Hs.143345:ESTs	2.18
	435049	AL122067	Hs.4748	Hs.4748:hypothetical protein FLJ21324	2.18
	418389	AA830613	Hs.293849	Hs.293849:ESTs	2.18
	450712	AJ732130	Hs.270496	Hs.270496:ESTs, Weakly similar to ALUB_H	2.18
	422007	AJ739435	Hs.39168	Hs.39168:ESTs, Weakly similar to T17340	2.18
80	453676	AW853745	Hs.286035	Hs.286035:hypothetical protein FLJ22686	2.18
	415718	F30631	Hs.200237	Hs.200237:ESTs	2.18
	452688	AA721140	Hs.49930	Hs.49930:ESTs, Weakly similar to B34087	2.18
	415988	BE407713	Hs.78943	NM_000366:Homo sapiens bleomycin hydrola	2.18
	409453	AJ885516	Hs.95612	Hs.95612:ESTs	2.17

5	417512	X76534	Hs.82226	NM_002510:Homo sapiens glycoprotein (tra	2.17
	427202	BE272922	Hs.173936	NM_000628:Homo sapiens interleukin 10 re	2.17
	440983	M20681	Hs.7594	NM_006931:Homo sapiens solute carrier fa	2.17
	416084	L16991	Hs.79006	NM_012145:Homo sapiens deoxythymidylate	2.17
	429642	X68264	Hs.211579	NM_006500:Homo sapiens melanoma adhesion	2.17
	427213	AW007211	Hs.348389	Hs.348389:hypothetical protein FLJ12876	2.17
	437763	AA469369	Hs.5831	NM_003254:Homo sapiens tissue inhibitor	2.17
	454000	AA040620	Hs.5672	Hs.5672:golgi membrane protein S8140	2.17
10	424247	X14008	Hs.234734	NM_000239:Homo sapiens lysozyme (ret amy	2.16
	403857				2.16
	406648	AA563730	Hs.277477	Hs.277477:major histocompatibility compl	2.16
	400265				2.16
	442379	NM_004813	Hs.8265	NM_004613:Homo sapiens transglutaminase 2	2.16
15	441892	AB028981	Hs.8021	Hs.8021:KIAA1058 protein	2.16
	417446	AL118671	Hs.82163	NM_000898:Homo sapiens monoamine oxidase	2.16
	418386	AA361739	Hs.84549	NM_002494:Homo sapiens DH dehydrogense (u	2.16
	414053	BE391635	Hs.75725	NM_003564:Homo sapiens transgelin 2 (TAG	2.16
	440906	AW161556	Hs.240170	Hs.240170:hypothetical protein MGC2731	2.16
20	447660	AW160386	Hs.163667	Hs.163667:ESTs, Weakly similar to CA1H_H	2.16
	408279	AF216965	Hs.44095	Hs.44095:cyclin M3	2.16
	426152	BE299190	Hs.167246	Hs.167246:P450 (cytochrome) oxidoreducta	2.16
	437952	D63209	Hs.5944	NM_014585:Homo sapiens solute carrier fa	2.16
	415661	AF057307	Hs.78575	Hs.78575:prosaposin (variant Gaucher dis	2.15
25	425302	U78115	Hs.155566	NM_003805:Homo sapiens CASP2 and RIPK1 d	2.15
	425996	W67330	Hs.374451	Hs.374451:ESTs	2.15
	417345	AW247252	Hs.75514	NM_000270:Homo sapiens nucleoside phosph	2.15
	422070	AF149785	Hs.111126	Hs.111126:pituitary tumor-transforming 1	2.15
	448424	AW009892	Hs.31824	Hs.31824:ESTs	2.15
30	430035	NM_003463	Hs.227777	NM_003463:Homo sapiens protein tyrosine	2.15
	438407	AJ457122	Hs.129673	Hs.129673:eukaryotic translation initiat	2.15
	435551	AF212365	Hs.5470	Hs.5470:interleukin 17B receptor	2.15
	437741	BE561610	Hs.5809	Hs.5809:putative transmembrane protein;	2.15
	441192	AA526626	Hs.7736	NM_016504:Homo sapiens mitochondrial rib	2.15
35	435750	AB029012	Hs.4990	Hs.4990:KIAA1089 protein	2.15
	411165	NM_000169	Hs.63089	NM_000169:Homo sapiens galactosidase, al	2.14
	425252	AW391162	Hs.349306	Hs.349306:hypothetical protein FLJ31951	2.14
	427600	AW630918	Hs.179774	NM_002818:Homo sapiens proteasome (proso	2.14
	426818	AA554827	Hs.292996	Hs.292996:postmeiotic segregation increa	2.14
40	442110	AF113008	Hs.8102	NM_001023:Homo sapiens ribosomal protein	2.14
	407797	AK000524	Hs.39850	Hs.39850:uridine kinase-like 1	2.14
	443044	N28522	Hs.8935	NM_014298:Homo sapiens quinolite phospho	2.14
	437103	AW139408	Hs.152940	Hs.152940:ESTs	2.14
	442089	AW684144	Hs.297007	Hs.297007:Homo sapiens cD FLJ32174 fts,	2.14
45	424954	NM_000546	Hs.1848	NM_000546:Homo sapiens tumor protein p53	2.14
	458097	AW341135	Hs.58104	Hs.58104:Homo sapiens, clone IMAGE:47309	2.14
	411925	AW014588	Hs.72925	NM_003475:Homo sapiens chromosome 11 ope	2.14
	449644	AW960707	Hs.148324	Hs.148324:ESTs	2.14
	422675	BE018517	Hs.119140	NM_001970:Homo sapiens eukaryotic transl	2.14
50	428586	M36712	Hs.2299	Hs.2299:CD8 antigen, beta polypeptide 1	2.14
	429379	NM_014840	Hs.200598	NM_014840:Homo sapiens KIAA0537 gene pro	2.13
	410290	AA023207	Hs.322844	Hs.322844:hypothetical protein DKFZp564A	2.13
	443895	AW979048	Hs.292566	Hs.292566:YEA4 protein	2.13
	428145	BE243327	Hs.182626	NM_012264:Homo sapiens chromosome 22 ope	2.13
55	453518	AW503205	Hs.27268	Hs.27268:Homo sapiens cD: FLJ21933 fts,	2.13
	456534	X91195	Hs.100623	Hs.100623:protein phosphatase 1, regulat	2.13
	419972	AL041465	Hs.182982	Hs.182982:golgin-67	2.13
	424950	AA602917	Hs.156974	Hs.156974:ESTs	2.13
	427557	NM_002659	Hs.179657	NM_002659:Homo sapiens plasminogen activ	2.13
60	431449	M55994	Hs.256278	NM_001066:Homo sapiens tumor necrosis fa	2.13
	418758	AW959311	Hs.172012	Hs.172012:hypothetical protein DKFZp434J	2.13
	434202	BE382411	Hs.3764	NM_000858:Homo sapiens guanilate kine 1	2.13
	432323	AB040927	Hs.301804	Hs.301804:KIAA1494 protein	2.12
	452700	AI859390	Hs.288940	Hs.288940:transmembrane protein 8 (five	2.12
65	438033	T26483	Hs.6059	NM_016938:Homo sapiens EGF-containing fi	2.12
	400847				2.12
	447547	NM_007229	Hs.18842	NM_007229:Homo sapiens protein kine C an	2.12
	417052	NM_000712	Hs.81029	NM_000712:Homo sapiens biliverdin reduct	2.12
	413284	AU077055	Hs.289107	NM_001168:Homo sapiens baculoviral IAP r	2.11
70	434558	AW264102	Hs.39168	Hs.39168:ESTs, Weakly similar to T17340	2.11
	404030				2.11
	410801	BE275469	Hs.66493	Hs.66493:Down syndrome critical region g	2.11
	418613	AA744529	Hs.86575	Hs.86575:mitogen-activated protein kine	2.11
	447087	AW403870	Hs.301872	Hs.301872:hypothetical protein MGC4840	2.11
75	433026	AW160616	Hs.279921	NM_016127:Homo sapiens hypothetical prot	2.11
	426433	L38969	Hs.169875	NM_007112:Homo sapiens thrombospondin 3	2.11
	442439	U09759	Hs.246857	NM_002752:Homo sapiens mitogen-activated	2.11
	437379	AL359575	Hs.23765	Hs.23765:membrane metallo-endopeptidase-	2.11
	400208				2.11
80	455705	AW161061	Hs.356580	Hs.356580:ESTs, Weakly similar to zinc f	2.11
	417599	AA204588	Hs.62954	Hs.62954:ferritin, heavy polypeptide 1	2.10
	416728	AB024597	Hs.78658	NM_001894:Homo sapiens casein kine 1, ep	2.10
	439920	H05430	Hs.288433	Hs.288433:neurotrophin	2.10
	422309	U79745	Hs.114924	NM_004694:Homo sapiens solute carrier fa	2.10

	436114	AA778232	Hs.19515	Hs.19515:ESTs, Highly similar to NRG3_HU	2.10
	405517				2.10
	421872	AA359753	Hs.22824	Hs.22824:MYB binding protein (P160) 1a	2.10
	437712	X04588	Hs.85844	Hs.85844:neurotrophic tyrosine kase, rec	2.10
5	431214	AA294921	Hs.348024	NM_002881:Homo sapiens v-rat simian leuk	2.10
	412856	BE386745	Hs.74631	NM_001728:Homo sapiens basigin (BSG), mR	2.10
	442064	AI422867	Hs.88594	Hs.88594:Homo sapiens, clone IMAGE:43329	2.10
	434845	BE267057	Hs.325321	Hs.325321:VD repeat domain 18	2.10
	426728	NM_007118	Hs.367689	NM_007118:Homo sapiens triple function d	2.10
10	419596	BE379320	Hs.91448	NM_007026:Homo sapiens dual specificity	2.09
	448913	AA194422	Hs.22564	NM_004999:Homo sapiens myosin VI (MYO6),	2.09
	414721	X90392	Hs.77091	NM_006730:Homo sapiens deoxyribonuclease	2.09
	424658	NM_002406	Hs.151513	NM_002406:Homo sapiens mannosyl (alpha-1	2.09
	432805	X94630	Hs.3107	Hs.3107:CD97 antigen	2.09
15	447032	AK000310	Hs.17138	Hs.17138:hypothetical protein FLJ20303	2.09
	447484	AA464839	Hs.292566	Hs.292566:YEA4 protein	2.09
	440188	AK001812	Hs.7036	Hs.7036:N-acetylglucosamine kase	2.09
	445584	AF217518	Hs.8360	Hs.8360:PTD012 protein	2.09
	402559				2.09
20	418043	AW377752	Hs.83341	Hs.83341:AXL receptor tyrosine kase	2.09
	448888	AW196663	Hs.200242	Hs.200242:caspase recruitment domain fam	2.09
	436910	AA926944	Hs.261587	Hs.261587:GCN2 eIF2alpha kase	2.09
	422573	AW297985	Hs.295726	Hs.295726:integrin, alpha V (vitronectin	2.08
	416448	L13210	Hs.79339	NM_005567:Homo sapiens lectin, galactosi	2.08
25	426727	AF078847	Hs.191356	NM_001515:Homo sapiens general transcrip	2.08
	410301	AW502935	Hs.740	Hs.740:PTK2 protein tyrosine kase 2	2.08
	449538	AI559444	Hs.104679	Hs.104679:Homo sapiens, clone MGC:18216	2.08
	421205	AL137540	Hs.102541	Hs.102541:netrin 4	2.08
	411779	AA292811	Hs.72050	NM_003551:Homo sapiens non-metastatic ce	2.08
30	427704	AW971063	Hs.292882	Hs.292882:ESTs	2.07
	413518	BE149455	Hs.75415	NM_004048:Homo sapiens beta-2-microglobu	2.07
	447345	BE247767	Hs.18166	Hs.18166:KIAA0870 protein	2.07
	407143	C14076	Hs.332329	Hs.332329:EST	2.07
	448431	BE613061	Hs.337772	Hs.337772:hypothetical protein BC009331	2.07
35	412760	AW379030	Hs.41324	Hs.41324:ESTs	2.07
	446859	AI494299	Hs.16297	NM_005694:Homo sapiens COX17 homolog, cy	2.07
	403966				2.07
	409115	AI223335	Hs.50651	NM_002227:Homo sapiens Janus kase 1 (a p	2.07
40	436823	AW749865	Hs.117077	Hs.117077:zinc finger protein 264	2.07
	414045	NM_002951	Hs.75722	NM_002951:Homo sapiens ribophorin II (RP	2.06
	413980	NM_002437	Hs.75659	NM_002437:Homo sapiens MpV17 transgene,	2.06
	439414	NM_001183	Hs.6551	NM_001183:Homo sapiens ATPase, H+ transp	2.06
	426059	BE292842	Hs.166120	NM_001572:Homo sapiens interferon regula	2.06
45	429849	U33053	Hs.2499	NM_002741:Homo sapiens protein kase C-8	2.06
	402424				2.06
	406626	X04526	Hs.215595	Hs.215595:guanine nucleotide binding pro	2.06
	458911	AA373131	Hs.24322	Hs.24322:ATPase, H+ transporting, lysoso	2.05
	426086	T94907	Hs.188572	Hs.188572:ESTs	2.05
50	419726	U50330	Hs.1274	NM_006129:Homo sapiens bone morphogeneti	2.05
	452344	AI264357	Hs.55405	Hs.55405:hypothetical protein MGC16212	2.05
	42498	U54617	Hs.8364	NM_002612:Homo sapiens pyruvate dehydrog	2.05
	422114	AW194851	Hs.111801	NM_015908:Homo sapiens arsenite resistance	2.05
	413420	AW410235	Hs.75348	NM_006263:Homo sapiens proteasome (proso	2.05
55	409430	R21945	Hs.346735	Hs.346735:Homo sapiens, clone IMAGE:3881	2.05
	409932	AI376750	Hs.57600	Hs.57600:adaptor-related protein complex	2.05
	434848	BE256304	Hs.32148	Hs.32148:AD-015 protein	2.04
	453852	AW961818	Hs.374424	Hs.374424:ESTs	2.04
	427637	AK000816	Hs.179986	NM_005803:Homo sapiens flotillin 1 (FLOT	2.04
	400264				2.04
60	430018	NM_004736	Hs.227656	NM_004736:Homo sapiens xenotropic and po	2.04
	410134	U68140	Hs.58927	Hs.58927:nuclear VCP-like	2.04
	440875	AW499914	Hs.7579	Hs.7579:importin 9	2.04
	432280	BE440142	Hs.2943	NM_003135:Homo sapiens sigI recognition	2.04
65	409504	AA304961	Hs.699	NM_000942:Homo sapiens peptidylprolyl is	2.04
	412145	M92444	Hs.73722	NM_001841:Homo sapiens APEX nuclease (mu	2.04
	434203	BE262677	Hs.283558	Hs.283558:hypothetical protein PRO1855	2.04
	422754	AA316478	Hs.171811	Hs.171811:adenylate kase 2	2.04
	406729	AA069711		AA069711:zm52b11.s1 Stratogene fibroblas	2.04
70	413086	AA126841	Hs.183834	Hs.183834:ESTs	2.03
	424340	AA339036	Hs.7033	Hs.7033:ESTs	2.03
	450440	AB024334	Hs.25001	NM_012479:Homo sapiens tyrosine 3-monoox	2.03
	424662	NM_002870	Hs.151536	NM_002870:Homo sapiens RAB13, member RAS	2.03
	415740	N80486	Hs.39911	Hs.39911:Homo sapiens mR for FLJ00089 pr	2.03
75	412749	AA378417	Hs.74564	NM_003145:Homo sapiens sigI sequence rec	2.03
	408393	AW015318	Hs.23165	Hs.23165:ESTs	2.03
	421295	AW081061	Hs.103180	Hs.103180:DC2 protein	2.03
	445417	AK001058	Hs.12680	Hs.12680:Homo sapiens cD FLJ10186 fa, c	2.03
	414883	AA926960	Hs.348669	NM_001826:Homo sapiens CDC28 protein kis	2.03
80	447298	BE617527	Hs.239818	Hs.239818:phosphoinositide-3-kase, catal	2.02
	459580	AA022888	Hs.176065	Hs.176065:ESTs	2.02
	422785	AI824114	Hs.289088	Hs.289088:heat shock 90kD protein 1, alp	2.02
	452696	AI826845	Hs.211534	Hs.211534:Homo sapiens cD FLJ31665 fa,	2.02
	452056	AW955065	Hs.101150	Hs.101150:KIAA1949 protein	2.02

5	450690	AA296696	Hs.333418	NM_014164:Homo sapiens FKXD domain-conta	2.02
	423527	AI206965	Hs.105861	Hs.105861:engulfment and cell motility 3	2.01
	429545	AI824164	Hs.356130	Hs.356130:ESTs	2.01
	439180	AI393742	Hs.199067	Hs.199067:v-erb-b2 erythroblastic leukem	2.01
	437193	BE259190	Hs.289721	Hs.289721:growth arrest-specific 5	2.01
	436014	AF281134	Hs.283741	Hs.283741:exosome component Rrp48	2.01
	453329	T97205	Hs.193400	Hs.193400:interleukin 6 receptor	2.01
	407347	AA829847	T23514:seq3329	1-NIB Homo sapiens cD cto	2.01
10	435370	AI964074	Hs.225838	Hs.225838:ESTs	2.01
	430657	AA482910	Hs.370602	Hs.370602:ESTs, Weakly similar to hypoth	2.01
	427157	U51166	Hs.173824	NM_003211:Homo sapiens thymine-D glycosy	2.01
	424833	NM_003894	Hs.153405	NM_003894:Homo sapiens period homolog 2	2.01
	440086	NM_005402	Hs.6906	NM_005402:Homo sapiens v-ral simian leuk	2.01
15	438543	AA810141	Hs.192182	Hs.192182:ESTs	2.01
	417426	NM_002291	Hs.82124	NM_002291:Homo sapiens laminin, beta 1 (	2.01
	412790	NM_014767	Hs.74583	NM_014767:Homo sapiens KIAA0275 gene pro	2.01
	445892	AV655500	Hs.93961	Hs.93961:Homo sapiens mR; cD DKFp667D09	2.01
20	TABLE 39B: Pkey: Unique Eos probeset identifier number CAT number: Gene cluster number Accession: Genbank accession numbers				
25	Pkey 409745	CAT Number MH1944_5	Accession BI030997 AA921874 AW188822 BI027862 AJ347618 AJ361453 AJ088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625 BI027864 BI009100 BI006275 BI006270 BI031000 BI029884 BI006277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377 AA150780 BI033518 BI027818 BG015789 BI033807 AA341445 AA229762 AA230035 BG171435 BE079601 BE079534 AA299964 BE392717 BE883402 BE079532 BE018148 BF889427 W00396. BC013310 AF261085 BC004109 AY007133 BC009081 BC001601 NM_002046 M33197 BC020308 J02642 M36164 BE794233 AV721080 BE255459 BG926429 BG389312 BG477333 AJ031799 BI763443 BI260432 AA989106 AV728576 BI091380 AA402499 AI200513 AI284734 AI223995 AI289749 BG283291 BM013814 AW438544 BM450203 F35435 F33262 BE890952 AA401181 BG939668 F35525 BI088182 F34674 F33506 BM471326 F34677 AW276712 AA187508 F34866 AA114245 AA522581 N23935 AI076923 AI018505 BE879774 BM465637 AJ753078 BG222159 AA595947 BF970917 BI094125 AA719841 BE893087 BG775178 BE793983 BE797071 BF339134 BE409272 BE266456 BE796770 BE745957 BG755835 BE266758 BE259342 BM450181 BG748174 BE299322 BM423587 BM467637 BM452667 BM479516 BM452420 BE273297 BM466364 BM450640 BM478743 BM459094 BM455308 BM472001 BM478247 BM478771 BM480379 BM459071 BM450106 BM467584 BM464548 BM465044 BM450176 BF569359 BM462924 BM455329 BM471815 BI862301 BG331736 H04903 AA374894 BE902964 AW977949 AA811347 D79715 BE048113 R98736 Z42904 X58141 NM_001119 AJ246786 BE645243 AI685698 AI208590 BE222576 AI191715 AI423108 BF064068 BG057819 AI208589 AI880535 AI262890 AI246261 BF939926 AI282848 AI802409 BE301053 AI884624 AJ160385 AJ335983 BF440017 BG231884 AJ343699 AI280745 AI871338 AI123739 AI871126 AW080375 AJ350160 AJ300855 AI818598 AI085263 AJ306653 AW571658 BF109839 AW273280 AI888380 AJ571860 AJ357126 AW194105 AI131474 AW316548 AW128942 AW571682 AI583962 AW300674 BF509394 AI891077 BF221538 AI651874 F25731 AW881176 AI685962 D44936 AI753874 BF593905 BE832830 AI637970 BE834103 BE464301 AJ908017 AJ378261 AA975416 R16732 H47612 H45402 AA668719 AA722441 AA991443 T51951 AW514058 AI277763 AA421907 AJ083831 H40630 NM_014190 BM469282 AL524786 AL527067 BF313768 AL042441 AL037806 BI195013 BE219292 BF055534 T95785 BE833037 AV648052 AA382588 W67987 H46049 R92289 H47699 AA380016 AL532433 BG958742 AI292151 H26003 R62487 BG766512 BE815124 AW136122 H96767 R39407 BI044500 H18771 H22071 R09985 R75803 H42172 BE770251 AL529310 F03180 R92185 H18680 R43192 AA401390 AA977941 AI091944 AA993369 AA617840 H14351 AI866242 AI915028 AA780787 AA506995 AA827496 AA634305 AA846358 AA470463 AA618163 AA601963 W74212 AA021520 AA421274 AA903521 AA411402 AA044448 AA983449 AA076114 AA633470 AA581793 AA019060 AA814222 AA693469 N99931 N67840 R26834 BF342340 AA976636 AA360268 AA976223 T95786 AA527774 AI620298 AA180888 AA149218 AA565201 BI001597 BE676565 AW169797 AW190994 AA299572 AI092819 AI291438 AA459586 AA136373 R50213 BE622752 AA401414 AA180973 AA766800 W96432 BI550308 H52236 AA491029 BG420468 BG827522 X78817 NM_001666 D50921 AW002308 AW575456 BF507511 AW467767 AJ910663 BF905778 BG251264 AL562106 AI890538 AW769258 AI590391 AI913055 AW083235 AJ078474 AJ925022 AW504628 AW129725 BE465589 AW002786 AW591760 AI968816 AW006268 AW593787 BG236814 AW769893 AJ047608 AW075982 AJ248207 AJ762509 AI812070 AJ249937 AW083561 AW080697 BF663046 BG745612 BG979546 AW793245 BI014177 AL519126 BE675314 AW806520 BI870778 BF879549 BE714919 BF847786 BG684161 AV695278 BG491029 BE793244 BE830893 BE798121 R09703 BI013066 X58141 NM_001119 AJ246786 BE645243 AI685698 AI208590 BE222576 AI191715 AI423108 BF064068 BG057819 AI208589 AI880535 AI262890 AI246261 BF939926 AI282848 AI802409 BE301053 AI884624 AJ160385 AJ335983 BF440017 BG231884 AJ343699 AI280745 AI871338 AI123739 AI871126 AW080375 AJ350160 AJ300855 AI818598 AI085263 AJ306653 AW571658 BF109839 AW273280 AI888380 AJ571860 AJ357126 AW194105 AI131474 AW316548 AW128942 AW571682 AI583962 AW300674 BF509394 AI891077 BF221538 AI651874 F25731 AW881176 AI685962 D44936 AI753874 BF593905 BE832830 AI637970 BE834103 BE464301 AJ908017 AJ378261 AA975416 R16732 H47612 H45402 AA668719 AA722441 AA991443 T51951 AW514058 AI277763 AA421907 AJ083831 H40630 NM_014190 BM469282 AL524786 AL527067 BF313768 AL042441 AL037806 BI195013 BE219292 BF055534 T95785 BE833037 AV648052 AA382588 W67987 H46049 R92289 H47699 AA380016 AL532433 BG958742 AI292151 H26003 R62487 BG766512 BE815124 AW136122 H96767 R39407 BI044500 H18771 H22071 R09985 R75803 H42172 BE770251 AL529310 F03180 R92185 H18680 R43192 AA401390 AA977941 AI091944 AA993369 AA617840 H14351 AI866242 AI915028 AA780787 AA506995 AA827496 AA634305 AA846358 AA470463 AA618163 AA601963 W74212 AA021520 AA421274 AA903521 AA411402 AA044448 AA983449 AA076114 AA633470 AA581793 AA019060 AA814222 AA693469 N99931 N67840 R26834 BF342340 AA976636 AA360268 AA976223 T95786 AA527774 AI620298 AA180888 AA149218 AA565201 BI001597 BE676565 AW169797 AW190994 AA299572 AI092819 AI291438 AA459586 AA136373 R50213 BE622752 AA401414 AA180973 AA766800 W96432 BI550308 H52236 AA491029 BG420468 BG827522 AA069711 T23514 AI655785		
30	418869	12789_14			
	421902	276321_1			
	400231	MH494_5			
35	438584	1241536_1			
	413020	1485885_1			
	400265	1145_1			
40					
45					
50					
55	400208	16640_1			
	400264	1145_1			
60					
65					
70	406729	0_0			
	407347	810943_1			
75	TABLE 39C: Pkey: Unique number corresponding to an Eos probeset Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495. Strand: Indicates DNA strand from which exons were predicted. NT_position: Indicates nucleotide positions of predicted exons.				
80	Pkey	Ref	Strand	NT_position	
	404240	5002624	Minus	116132-116407,116653-116922	
	404277	1834458	Minus	91665-91946	

5	401179	9438647	Plus	113477-113893
	405102	8076881	Minus	120922-121296
	402575	9884830	Minus	109742-109883
	402801	8894222	Minus	175428-175667
	405204	7230116	Plus	126569-126754
	403857	7708910	Minus	2524-3408
	400847	9188605	Plus	44643-44835
	404030	7671252	Plus	149362-151749
10	405517	9454624	Plus	114757-114877
	402559	9864273	Plus	33539-33715
	403966	8568881	Plus	158193-158277,160116-160290
	402424	9796344	Minus	64925-65073

# 15 TABLE 40A: ABOUT 977 GENES UP-REGULATED IN STOMACH CANCER

Table 40A lists about 977 genes up-regulated in stomach cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hu03 GeneChip array such that the ratio of "average" stomach cancer to "average" normal adult tissues was greater than or equal to 2.0. The "average" stomach cancer level was set to the 90th percentile amongst various stomach cancers. The "average" normal adult tissue level was set to the 90th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

20 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 25 R1: Ratio of tumor to normal adult tissues

	Pkey	ExAccn	UnigeneID	Unigene Title	R1
	411243	AB039886	Hs.69319	CA11	30.66
30	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	16.94
	444325	AW152618	Hs.16757	ESTs	13.51
	445891	AW391342	Hs.199460	ESTs	11.92
	448811	AI590371	Hs.174759	ESTs	11.08
	431723	AW058350	Hs.16762	Homo sapiens mRNA: cDNA DKFZp564B2062 (f	10.84
35	409757	NM_001898	Hs.123114	cystatin SN	10.38
	421110	AJ250717	Hs.1355	cathepsin E	9.11
	428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin	8.66
	446998	N99013	Hs.16762	Homo sapiens mRNA: cDNA DKFZp564B2062 (f	8.50
	406687	M31126	Hs.272620	pregnancy specific beta-1-glycoprotein 9	7.11
40	428651	AF198478	Hs.188401	annexin A10	6.86
	425211	M18667	Hs.1867	progastricsin (pepsinogen C)	6.51
	423673	BE003054	Hs.1695	matrix metalloproteinase 12 (macrophage	6.49
	409683	U33317	Hs.711	defensin, alpha 5, Paneth cell-specific	6.39
	422260	AA315993	Hs.105484	ESTs, Weakly similar to LTB_HUMAN LUTHO	6.31
45	428664	AK001666	Hs.189095	similar to SALL1 (sal (Drosophila)-like	6.25
	409041	AB033025	Hs.50081	KQAA1199 protein	5.72
	408380	AF123050	Hs.44532	dubinquin	5.72
	428953	AA306610	Hs.194676	DKFZP434C013 protein	5.46
	405685	L15533	Hs.423	pancreatitis-associated protein	5.40
50	409187	AF154830	Hs.50966	carbamoyl-phosphate synthetase 1, mitoch	5.34
	434206	AW136973	Hs.288516	ESTs, Weakly similar to S69890 mitogen i	5.16
	421346	Z34277	Hs.103707	apomucin	5.14
	427585	D31152	Hs.179729	collagen, type X, alpha 1 (Schmid metaph	5.08
	425679	X05997	Hs.159177	lipase, gastric	4.94
55	421582	AI910275	Hs.1406	trefoil factor 1 (breast cancer, estroge	4.93
	434414	AI798376		gb:tr34b07.x1 NC1_CGAP_Ov23 Homo sapiens	4.92
	422956	BE545072	Hs.122579	hypothetical protein FLJ10461	4.89
	448105	AW591433	Hs.170675	ESTs, Weakly similar to TMS2_HUMAN TRANS	4.84
	423575	C18863	Hs.153443	Homo sapiens cDNA FLJ11576 fs, clone HE	4.72
60	413385	M34455	Hs.840	indoleamine-pyrole 2,3 dioxygenase	4.72
	417866	AW067903	Hs.82772	collagen, type XI, alpha 1	4.68
	448693	AW004854	Hs.228320	Homo sapiens cDNA: FLJ23537 fs, clone L	4.53
	441377	BE218239	Hs.202656	ESTs	4.51
	419278	AJ078799	Hs.1247	apoptoprotein A-IV	4.48
65	407811	AW190902	Hs.40098	cysteine knot superfamily 1, BMP antagonist	4.47
	403422				4.38
	403776				4.32
	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	4.32
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	4.30
70	421341	AJ243212	Hs.279611	deleted in malignant brain tumors 1	4.30
	451181	AI796330	Hs.207461	ESTs	4.26
	432168	AK000563	Hs.272805	hypothetical protein FLJ20556	4.23
	454464	AW811606	Hs.271819	Homo sapiens cDNA: FLJ22751 fs, clone K	4.20
	448844	AI581519	Hs.177164	ESTs	4.14
75	428434	AW383590	Hs.65551	ESTs, Weakly similar to AF172993 1 PLUNC	4.13
	425461	N78223	Hs.108106	transcription factor	4.08
	409420	Z15008	Hs.54451	laminin, gamma 2 (nicotin (100kD), kerat	4.04
	431611	U58766	Hs.264428	tissue specific transplantation antigen	4.04
	413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	4.03
80	430044	AA484510	Hs.152612	ESTs	4.02
	409956	AW103364	Hs.727	inhibin, beta A (activin A, activin AB a	4.01
	422420	U03398	Hs.1524	tumor necrosis factor (ligand) superfam	4.00
	420159	AI572490	Hs.99785	Homo sapiens cDNA: FLJ21245 fs, clone C	3.98
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	3.91

5	422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	3.87
	452304	AA025386	Hs.61311	ESTs, Weakly similar to S10590 cysteine	3.84
	412140	AA219691	Hs.73625	RAB6 interacting, kinesin-like (rablines	3.82
	414812	X72755	Hs.77367	monokine induced by gamma interferon	3.81
	419833	AA251131	Hs.220697	ESTs	3.81
	446232	AJ281848	Hs.165347	ESTs	3.74
	432398	AA307808	Hs.2979	trefol factor 2 (spasmolytic protein 1)	3.70
	451105	AJ761324		gbw60b11.x1 NCI_CGAP_Co16 Homo sapiens	3.67
10	413281	AA861271	Hs.34396	ESTs	3.66
	432867	AW016936	Hs.233364	ESTs	3.66
	424048	AF027866	Hs.138202	serine (or cysteine) proteinase inhibito	3.65
	457465	AW301344	Hs.195969	ESTs	3.65
	414918	AJ219207	Hs.72222	Homo sapiens cDNA FLJ13459 fs, clone PL	3.61
15	418738	AW388633	Hs.6682	ESTs	3.60
	427778	AA412323	Hs.105323	ESTs	3.60
	454293	H49739	Hs.134013	ESTs, Moderately similar to NK homeobox	3.59
	452194	AJ694413	Hs.298262	ESTs, Weakly similar to dJ88J8.1 (Hsapi	3.57
	442577	AA292988	Hs.163900	ESTs	3.57
20	426174	AA547959	Hs.115838	ESTs	3.53
	452662	AW378065	Hs.8687	ESTs	3.51
	418869	AW516565	Hs.258279	ESTs	3.48
	430178	AW449612	Hs.152475	ESTs	3.48
	430397	AJ924533	Hs.105607	ESTs	3.46
25	418054	NM_002318		lysyl oxidase-like 2	3.45
	422295	AJ827248	Hs.224398	Homo sapiens cDNA FLJ11469 fs, clone HE	3.44
	425921	NM_007231	Hs.162211	solute carrier family 6 (neurotransmitte	3.44
	431764	AA515212	Hs.271819	Homo sapiens cDNA: FLJ22751 fs, clone K	3.43
	421948	L42583	Hs.111758	keratin 6A	3.43
30	444381	BE387335	Hs.283713	ESTs, Weakly similar to CA54_HUMAN COLLA	3.41
	442896	R37725	Hs.261108	ESTs	3.41
	452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fs, clone PL	3.39
	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	3.39
	408832	AW085690	Hs.63428	ESTs	3.39
35	406685	M18728		gb:Human nonspecific crossreacting antig	3.37
	437527	AJ241019	Hs.145644	ESTs	3.37
	433084	M18079	Hs.282265	fatty acid binding protein 2, intestinal	3.37
	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	3.36
	441318	AJ078234	Hs.176130	ESTs	3.35
40	458897	U85642	Hs.138506	ESTs	3.33
	413808	J00287	Hs.182183	caldesmon 1	3.33
	411274	NM_002776	Hs.69423	kalikrein 10	3.32
	418406	X73501	Hs.84905	cytokeratin 20	3.32
	419559	Y07828	Hs.91096	ring finger protein	3.32
45	423217	NM_000094	Hs.1640	collagen, type VII, alpha 1 (epidermolys	3.31
	423271	W47225	Hs.126256	interleukin 1, beta	3.31
	411558	AA102670	Hs.70725	gamma-aminobutyric acid (GABA) A recepto	3.30
	427722	AK000123	Hs.180479	hypothetical protein FLJ20116	3.30
	422310	AA316622	Hs.98370	cytochrome P540 family member predicted	3.30
50	430704	AW813091		gb:RC3-ST0186-240400-111-d07 ST0186 Homo	3.29
	411263	BE297802	Hs.69360	kinesin-like 6 (mitotic centromere-assoc	3.29
	443211	AJ128388	Hs.143655	ESTs	3.29
	443426	AF098158	Hs.9329	chromosome 20 open reading frame 1	3.28
	441085	AW136551	Hs.181245	Homo sapiens cDNA FLJ12532 fs, clone NT	3.28
55	452121	NM_004081	Hs.70936	deleted in azoospermia	3.27
	408633	AW963372	Hs.46677	PRO2000 protein	3.27
	447342	AJ199268	Hs.19322	ESTs	3.25
	419229	AJ827237	Hs.282884	ESTs	3.24
	443957	AA521049	Hs.34487	hypothetical protein FLJ23412	3.23
60	452699	AW295390	Hs.213062	ESTs	3.23
	425188	AK002052	Hs.155071	hypothetical protein FLJ11190	3.23
	400289	X07820	Hs.2258	matrix metalloproteinase 10 (stromelysin	3.21
	408524	D87942	Hs.46328	fucoyltransferase 2 (secretor status in	3.20
	437897	AA770561	Hs.146170	hypothetical protein FLJ22969	3.20
65	453922	AF053306	Hs.36708	budding uninhibited by benzimidazoles 1	3.19
	453160	AJ263307	Hs.146228	ESTs	3.19
	406690	M29540	Hs.220529	carcinoembryonic antigen-related cell ad	3.19
	430187	AJ799909	Hs.158989	ESTs	3.18
	416209	AA236776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	3.16
70	447048	AW393080	Hs.228320	Homo sapiens cDNA: FLJ23537 fs, clone L	3.14
	408113	T82427	Hs.194101	Homo sapiens cDNA: FLJ20869 fs, clone A	3.14
	425465	L18964	Hs.1904	protein kinase C, iota	3.13
	425826	U97698	Hs.159593	mucin 6, gastric	3.13
	431662	AA513406	Hs.152307	ESTs	3.13
75	419216	AJ076718	Hs.164021	small inducible cytokine subfamily B (Cy	3.13
	418203	X54942	Hs.83758	CDC28 protein kinase 2	3.12
	417315	AJ080042	Hs.180450	ribosomal protein S24	3.11
	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	3.11
	459587	AA031956		gb:z15e04.a1 Soares_pregnant_uterus_Nbh	3.11
80	450159	AJ702416	Hs.200771	ESTs, Weakly similar to CAN2_HUMAN CALPA	3.11
	434370	AF130988	Hs.58346	downless (mouse) homolog	3.10
	421190	U95031	Hs.102482	mucin 5, subtype 8, tracheobronchial	3.10
	421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	3.10
	420380	AA640891	Hs.102406	ESTs	3.10

	414774	X02419	Hs.77274	plasminogen activator, urokinase	3.10
	415989	AJ267700	Hs.111128	ESTs	3.09
	407137	T97307	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	3.09
5	407289	AA135159	Hs.203349	Homo sapiens cDNA FLJ12149 fs, clone MA	3.09
	420297	AJ628272	Hs.88323	ESTs	3.08
	447519	U46258	Hs.23448	ESTs	3.08
	448045	AJ297436	Hs.20166	prostate stem cell antigen	3.07
	431956	AK002032	Hs.272245	Homo sapiens cDNA FLJ11170 fs, clone PL	3.06
10	410286	AJ739159	Hs.61898	DXFZP586N2124 protein	3.05
	409632	W74001	Hs.55279	serine (or cysteine) proteinase inhibitor	3.05
	454034	NM_000691	Hs.575	aldehyde dehydrogenase 3	3.05
	436481	AA379597	Hs.5199	HSPC150 protein similar to ubiquitin-con	3.05
	430573	AA744550	Hs.136345	ESTs	3.05
15	428987	NM_004751	Hs.194710	glucosaminyl (N-acetyl) transferase 3, m	3.04
	424252	AK000520	Hs.143811	hypothetical protein FLJ20513	3.04
	436291	BE568452	Hs.5101	protein regulator of cytokinesis 1	3.03
	415992	C05837	Hs.145807	Homo sapiens cDNA FLJ13593 fs, clone PL	3.03
	411789	AF245505	Hs.72157	Homo sapiens adican mRNA, complete cds	3.02
20	417956	AA210704	Hs.190465	ESTs	3.02
	408908	BE296227	Hs.48915	serine/threonine kinase 15	3.01
	422330	O30783	Hs.115263	epiregulin	3.01
	425071	NM_013989	Hs.154424	deiodinase, iodothyronine, type II	3.00
	425761	AW664214	Hs.196729	ESTs	2.99
25	432978	AF126743	Hs.279884	DNAJ domain-containing	2.99
	418546	AA224827	gb:nc32g04.s1 NCL_CGAP_Pr2 Homo sapiens	2.99	
	425371	D49441	Hs.155981	mesothelin	2.99
	422440	NM_004812	Hs.116724	aldo-keto reductase family 1, member B11	2.98
	439453	BE264974	Hs.6566	thyroid hormone receptor interactor 13	2.98
30	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	2.97
	428450	NM_014791	Hs.184339	KIAA0175 gene product	2.95
	424345	AK001380	Hs.145479	Homo sapiens cDNA FLJ10518 fs, clone NT	2.95
	433133	AB027249	Hs.104741	PDZ-binding kinase; T-cell originated pr	2.94
	432269	NM_002447	Hs.2942	macrophage stimulating 1 receptor (c-met	2.94
35	432917	NM_014125	Hs.279812	PRO0327 protein	2.94
	433384	AJ021992	Hs.124244	ESTs	2.93
	432731	R31178	Hs.287820	fibronectin 1	2.93
	420552	AK000492	Hs.98806	hypothetical protein	2.92
	428303	AW974476	Hs.183601	regulator of G-protein signalling 16	2.92
40	409687	T51125	Hs.8493	ESTs	2.91
	434377	AW137148	Hs.136348	osteoblast specific factor 2 (fascilin	2.89
	417791	AW965339	Hs.111471	ESTs	2.89
	457288	AA521458	Hs.192738	ESTs	2.89
	456181	L36463	Hs.10330	ras inhibitor	2.89
45	450190	T51387	gb:yb20e08.r1 Stratagene fetal spleen (9	2.88	
	411573	AB029000	Hs.70823	KIAA1077 protein	2.88
	430204	AA618335	Hs.146137	ESTs, Weakly similar to putative JC.eleg	2.88
	434808	AF155108	Hs.256150	ESTs, Highly similar to NY-REN-41 antibo	2.87
	450983	AA305384	Hs.25740	ERO1 (S. cerevisiae)-like	2.87
50	418670	AA601036	Hs.285083	ESTs	2.87
	416661	AA634543	Hs.79440	IGF-II mRNA-binding protein 3	2.87
	409723	AW885757	Hs.257862	ESTs	2.87
	435099	AC004770	Hs.4756	flap structure-specific endonuclease 1	2.86
	408660	AA525775	Hs.292523	ESTs	2.86
55	434032	AW009951	Hs.206892	ESTs	2.85
	418216	AA662240	Hs.283099	AF15q14 protein	2.85
	453331	AJ240665	Hs.8895	ESTs	2.85
	450221	AA328102	Hs.24641	cytoskeleton associated protein 2	2.84
	402075				2.84
60	410145	AW886300	gb:RC5-OT0078-100400-023-C11 OT0078 Homo	2.83	
	410681	AW246890	Hs.65425	calbindin 1, (28kD)	2.83
	439867	AA847510	Hs.181292	ESTs	2.83
	443715	AJ583187	Hs.9700	cyclin E1	2.83
	420005	AW271106	Hs.133294	ESTs	2.83
65	417368	BE185289	Hs.1076	small proline-rich protein 1B (cornutin	2.83
	422283	AW411307	Hs.114311	CDC45 (cell division cycle 45, S.cerevis	2.82
	404567				2.82
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	2.82
	449224	AW995911	Hs.299883	hypothetical protein FLJ23399	2.81
70	407584	W25945	Hs.18745	ESTs	2.81
	453884	AA355925	Hs.36232	KIAA0186 gene product	2.81
	449032	AA045573	Hs.22900	nuclear factor (erythroid-derived 2)-lik	2.80
	422809	AK001379	Hs.121028	hypothetical protein FLJ10549	2.79
	449722	BE280074	Hs.23960	cyclin B1	2.79
75	445676	AJ247763	Hs.16928	ESTs	2.79
	424308	AW975531	Hs.154443	minichromosome maintenance deficient (S.	2.78
	453028	AB006632	Hs.31442	RecQ protein-like 4	2.78
	421777	BE562088	Hs.108196	HSPC037 protein	2.78
	452571	W31518	Hs.34665	ESTs	2.77
80	420759	T11832	Hs.127797	ESTs	2.77
	422675	BE018517	Hs.119140	eukaryotic translation initiation factor	2.77
	412723	AA548459	Hs.179912	ESTs	2.76
	439670	AF088076	Hs.59507	ESTs, Weakly similar to AC004858 3 U1 sm	2.76
	400298	AA032279	Hs.61635	six transmembrane epithelial antigen of	2.76



	414569	AF109298	Hs.118258	prostate cancer associated protein 1	2.76
	449378	AW664026	Hs.59892	ESTs	2.75
	423903	M57765	Hs.1721	Interleukin 11	2.75
5	412059	AA317962	Hs.249721	ESTs	2.75
	431104	AW970859	Hs.269109	ESTs	2.75
	439759	AL359055	Hs.67709	Homo sapiens mRNA full length insert cDN	2.75
	450701	H39980	Hs.288467	Homo sapiens cDNA FLJ12280 fis, clone MA	2.75
	452940	AA029722	Hs.20279	ESTs	2.74
	408690	AW864542		gb:PMAS-SN0016-120500-003-h02 SN0016 Homo	2.74
10	407777	AA161071	Hs.71465	squalene epoxidase	2.73
	432201	AI538613	Hs.135657	ESTs	2.73
	414416	AW409985	Hs.76084	lamin B2	2.73
	414617	A339520	Hs.20524	ESTs, Moderately similar to hexokinase 1	2.73
	432407	AA221036	Hs.285026	HERV-H LTR-associating 1	2.73
15	444301	AK000136	Hs.10760	hypothetical protein FLJ20129	2.72
	450375	AA009647	Hs.8850	a disintegrin and metalloproteinase doma	2.72
	441362	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E. coli Ra	2.72
	408298	AI745325	Hs.271923	Homo sapiens cDNA: FLJ22785 fis, clone K	2.72
20	426711	AA383471	Hs.180669	conserved gene amplified in osteosarcoma	2.71
	429432	AI678059	Hs.202676	synaptonemal complex protein 2	2.71
	450506	NM_004460	Hs.418	fibroblast activation protein, alpha	2.71
	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S.	2.71
	418801	AA228366	Hs.115122	ESTs	2.71
	440283	AI732892	Hs.190489	ESTs	2.71
25	429486	AF155827	Hs.203963	hypothetical protein FLJ10339	2.71
	408366	AW511255	Hs.258082	ESTs	2.70
	406399				2.69
	434217	AW014795	Hs.23349	ESTs	2.68
30	449785	AI225235	Hs.288300	Homo sapiens cDNA: FLJ23231 fis, clone C	2.68
	446269	AW263155	Hs.14559	hypothetical protein FLJ10540	2.68
	443349	AI052572	Hs.269864	ESTs	2.68
	426514	BE616633	Hs.301122	bone morphogenetic protein 7 (osteogenic	2.67
	417079	U65590	Hs.81134	Interleukin 1 receptor antagonist	2.67
35	444754	T83911	Hs.11881	transmembrane 4 superfamily member 4	2.67
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	2.66
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	2.65
	424408	AI754813	Hs.146428	collagen, type V, alpha 1	2.65
	430832	AI073913	Hs.100686	ESTs, Weakly similar to secreted cement	2.65
40	427217	AA399272	Hs.144341	ESTs	2.65
	429170	NM_0010394	Hs.2359	dual specificity phosphatase 4	2.64
	450400	AI694722	Hs.279744	ESTs	2.64
	435380	AA679001	Hs.192221	ESTs	2.64
	432375	BE536069	Hs.2982	S100 calcium-binding protein P	2.63
45	453700	AB009426	Hs.560	apolipoprotein B mRNA editing enzyme, ca	2.63
	422938	NM_001809	Hs.1594	centromere protein A (17kD)	2.63
	453134	AA032211	Hs.118493	ESTs	2.63
	420727	H75701	Hs.99886	complement component 4-binding protein,	2.62
	408668	AW292286	Hs.255058	ESTs	2.62
	414972	BE263782	Hs.77695	KIAA0008 gene product	2.62
50	440255	AI932285	Hs.160569	ESTs	2.62
	403055				2.62
	443247	BE614387	Hs.47378	ESTs, Moderately similar to hypothetical	2.62
	447400	AK000322	Hs.18457	hypothetical protein FLJ20315	2.61
55	413753	U17760	Hs.301103	Human DNA sequence from clone 272L18 on	2.61
	445114	AW991959	Hs.254664	ESTs	2.61
	422397	AJ223366	Hs.116051	myeloma overexpressed gene(in a subset o	2.60
	407366	AF026942		gb:Homo sapiens cig33 mRNA, partial sequ	2.60
	432009	AL137424		gb:Homo sapiens mRNA; cDNA DKFZp781G2123	2.60
60	440249	AI246590	Hs.125325	ESTs	2.60
	433220	AI076192	Hs.131933	ESTs	2.60
	438533	AI440266	Hs.170673	ESTs, Weakly similar to AF126780 1 retin	2.60
	436251	BE515065	Hs.5092	nucleolar protein (KKE/D repeat)	2.60
	424717	H03754	Hs.152213	wingless-type MMTV integration site fami	2.60
65	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	2.60
	425463	AK000740	Hs.157986	hypothetical protein FLJ20733	2.60
	435370	AI964074	Hs.225838	ESTs	2.59
	432215	AU076609	Hs.2934	ribonucleotide reductase M1 polypeptide	2.59
	409142	AL136877	Hs.50758	chromosome-associated polypeptide C	2.59
70	443919	AI091284	Hs.135224	ESTs	2.58
	413268	AL039079	Hs.75256	regulator of G-protein signalling 1	2.58
	404519				2.58
	414998	NM_002543	Hs.77729	oxidised low density lipoprotein (lectin	2.57
	429597	NM_003816	Hs.2442	a disintegrin and metalloproteinase doma	2.57
75	426841	AI052358	Hs.193726	ESTs	2.57
	416768	AA363733	Hs.1032	regenerating islet-derived 1 alpha (panc	2.57
	417933	X02308	Hs.82962	thymidylate synthetase	2.56
	433675	AW977653	Hs.110771	Homo sapiens cDNA: FLJ21904 fis, clone H	2.56
	441384	AA447849	Hs.288660	protease, serine, 23	2.56
80	451939	U80456	Hs.27311	single-minded (Drosophila) homolog 2	2.55
	418867	D31771	Hs.89404	msh (Drosophila) homeo box homolog 2	2.55
	449042	AW294985	Hs.301148	potassium voltage-gated channel, Isk-rel	2.55
	416065	BE267931	Hs.78996	proliferating cell nuclear antigen	2.55
	414132	AI801235	Hs.48480	ESTs	2.55

	431890	X17033	Hs.271986	integrin, alpha 2 (CD49B, alpha 2 subunit)	2.55
	407830	NM_001086	Hs.587	arylacetylamine deacetylase (esterase)	2.55
	434815	AF155582	Hs.46744	core1 UDP-galactose:N-acetylgalactosamin	2.54
	415250	F02614	Hs.27319	ESTs	2.54
5	435647	AJ653240	Hs.49823	ESTs	2.54
	459306	AW578452	Hs.232888	ESTs, Weakly similar to mucin (H.sapiens	2.54
	414361	AJ086138	Hs.204044	ESTs	2.54
	425782	U66468	Hs.159525	cell growth regulatory with EF-hand doma	2.53
	416984	H38765	Hs.80706	diaphorase (NADH/NADPH) (cytochrome b-5	2.53
10	431183	NM_006855	Hs.250696	KDEL (Lys-Asp-Glu-Leu) endoplasmic retic	2.53
	436043	AW963838	Hs.168830	Homo sapiens cDNA FLJ12136 fs, clone MA	2.53
	456743	AJ630124	Hs.7434	ESTs	2.53
	410268	AA316181	Hs.61635	six transmembrane epithelial antigen of	2.52
	424905	NM_002497	Hs.153704	NIMA (never in mitosis gene a)-related k	2.52
15	411734	AW374954	Hs.71779	Homo sapiens DNA from chromosome 19, cos	2.52
	432657	AA831815	Hs.270940	ESTs	2.51
	434080	AJ820719	Hs.154662	hypothetical protein PRO1472	2.51
	438190	AA780020	Hs.136798	ESTs	2.51
	418969	W33191	Hs.28907	hypothetical protein FLJ20258	2.51
20	446405	AW451259	Hs.57851	ESTs	2.51
	450002	AJ879524	Hs.201629	ESTs, Moderately similar to ALU8_HUMAN A	2.51
	431808	M30703	Hs.270833	amphiregulin (schwannoma-derived growth	2.51
	429093	NM_000253	Hs.195799	microsomal triglyceride transfer protein	2.50
25	447634	AW967802	Hs.5152	Homo sapiens cDNA: FLJ22618 fs, clone H	2.50
	436393	AW022213	Hs.143617	ESTs	2.50
	453751	R36762	Hs.101282	Homo sapiens mRNA; cDNA DKFZp434B102 (lr	2.49
	445669	AJ570830	Hs.174870	ESTs	2.49
	445865	AJ262584	Hs.145575	ESTs	2.49
30	448437	AW470125		gb:zv60c04.x1 NCI_CGAP_Pan1 Homo sapiens	2.49
	414883	AA926960	Hs.77550	CDC28 protein kinase 1	2.49
	406747	AJ925153	Hs.217493	annexin A2	2.49
	446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	2.49
	426322	J05068	Hs.2012	transcobalamin I (vitamin B12 binding pr	2.48
35	412903	BE007967	Hs.155795	ESTs	2.48
	422515	AW500470	Hs.117950	multifunctional polypeptide similar to S	2.48
	447030	AW444659	Hs.232184	ESTs	2.48
	448454	NM_005879	Hs.21254	TRAF interacting protein	2.48
	419092	J05581	Hs.89603	mucin 1, transmembrane	2.48
40	406671	AA129547	Hs.285754	met proto-oncogene (hepatocyte growth fa	2.48
	409640	U78722	Hs.55481	zinc finger protein 165	2.48
	424639	AJ917494	Hs.131329	ESTs	2.48
	404171				2.47
	414747	U30872	Hs.77204	centromere protein F (350/400kD, mitosis	2.47
45	407839	AA045144	Hs.161566	ESTs	2.47
	410406	AJ969703	Hs.301842	ESTs	2.47
	452220	BE158006	Hs.212296	ESTs	2.46
	427691	AW194426	Hs.20726	ESTs	2.46
	421493	BE300341	Hs.104925	ectodermal-neural cortex (with BTB-like	2.46
50	444838	AV651680	Hs.208558	ESTs	2.46
	413816	AW958181	Hs.189998	ESTs	2.46
	408296	AL117452	Hs.44155	DKFZP586G1517 protein	2.46
	436613	AA972691	Hs.192974	Homo sapiens cDNA FLJ12735 fs, clone NT	2.45
	445417	AK001058	Hs.12680	Homo sapiens cDNA FLJ10196 fs, clone HE	2.45
	432874	W94322	Hs.279651	melanoma inhibitory activity	2.45
55	425268	AJ807883	Hs.156932	ESTs	2.45
	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kD)	2.45
	408308	AL033377	Hs.44197	hypothetical protein DKFZp564D0462	2.45
	427861	AW293165	Hs.143134	ESTs	2.45
	422363	T55979	Hs.115474	replication factor C (activator 1) 3 (38	2.45
60	433083	AL042759	Hs.191762	ESTs	2.45
	439848	AW979249		gb:EST391359 MAGE resequences, MAGP Homo	2.44
	431924	AK000850	Hs.272203	Homo sapiens cDNA FLJ20843 fs, clone AD	2.44
	431457	NM_012211	Hs.256297	integrin, alpha 11	2.44
65	443949	AW827419	Hs.235070	ESTs	2.44
	416498	U33632	Hs.79351	potassium channel, subfamily K, member 1	2.44
	428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino	2.43
	431858	XG3829	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	2.43
	413833	Z15005	Hs.75573	centromere protein E (312kD)	2.43
70	407243	AA058357	Hs.74466	carcinoembryonic antigen-related cell ad	2.43
	410044	BE566742	Hs.58169	highly expressed in cancer, rich in leuc	2.43
	424273	W40460	Hs.144442	phospholipase A2, group X	2.42
	409533	AW969543	Hs.21291	mitogen-activated protein kinase kinase	2.42
	453966	BE148734	Hs.252833	ESTs	2.42
	427043	AA397879	Hs.298460	ESTs	2.42
75	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	2.42
	449987	AW079749	Hs.184719	ESTs, Weakly similar to AF116721 112 PRO	2.42
	433159	AB035898	Hs.150587	kinesin-like protein 2	2.42
	439396	BE562958	Hs.74346	ESTs, Weakly similar to /prediction	2.42
	426427	M86699	Hs.169840	TTK protein kinase	2.41
80	434725	AK000796	Hs.4104	hypothetical protein	2.41
	427719	AJ393122	Hs.134726	ESTs	2.41
	433312	AJ241331	Hs.131765	ESTs	2.41
	432615	AA557191	Hs.55028	ESTs	2.41

	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	2.41
	419220	AA811938	Hs.291759	ESTs	2.40
	416530	U62801	Hs.79361	kallikrein 6 (neurosin, zyme)	2.40
5	435219	AA676349	Hs.190331	ESTs	2.40
	447164	AF026941	Hs.17518	Homo sapiens cig5 mRNA, partial sequence	2.40
	418713	T70174		gb:yc18b03.s1 Stratagene lung (937210) H	2.40
	418322	AA284166	Hs.84113	cyclin-dependent kinase inhibitor 3 (CDK	2.40
	409902	A1337658	Hs.156351	ESTs	2.40
10	443597	A1078418		gb:oz05e03.x1 Soares_fetal_liver_spleen_	2.40
	404253				2.40
	428970	BE276891	Hs.194691	retinoic acid induced 3	2.40
	443462	A1064690	Hs.171176	ESTs	2.39
	418693	A1750878	Hs.87409	thrombospondin 1	2.39
15	451237	AW600293		gb:EST00049 pGEM-T library Homo sapiens	2.39
	407756	AA116021	Hs.38260	ubiquitin specific protease 18	2.39
	437935	AW539591	Hs.5940	hypothetical protein FLJ20063	2.39
	445625	BE246743	Hs.288529	Homo sapiens cDNA: FLJ22635 fs, clone H	2.39
	435937	AA830893	Hs.119769	ESTs	2.39
20	438993	AA828995		gb:zd77b08.s1 NCI_CGAP_Ov2 Homo sapiens	2.38
	422082	AA016188	Hs.111244	hypothetical protein	2.38
	435849	BE305242	Hs.112442	ESTs, Weakly similar to CLDE_HUMAN CLAUD	2.38
	407242	M18728		gb:Human nonspecific crossreacting anti	2.38
	450396	AU077002	Hs.24950	regulator of G-protein signaling 5	2.38
25	430354	AA954810	Hs.239784	human homolog of Drosophila Scribble	2.38
	422578	AF239666	Hs.1545	caudal type homeo box transcription fact	2.38
	448342	BE298665	Hs.14846	Homo sapiens mRNA; cDNA DKFZp564D016 (fr	2.38
	450737	AW007152	Hs.203330	ESTs	2.38
	428070	T63918	Hs.182313	retinol-binding protein 2, cellular	2.38
30	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	2.37
	433345	A1681545	Hs.152982	Homo sapiens cDNA FLJ13117 fs, clone NT	2.37
	427557	NM_002559	Hs.179657	plasminogen activator, urokinase recepto	2.37
	423554	M60516	Hs.1674	glutamine-fructose-6-phosphate transamin	2.37
	453204	R10799	Hs.191990	ESTs	2.37
35	453876	AW021748	Hs.110406	ESTs	2.36
	425081	X74794	Hs.154443	minichromosome maintenance deficient (S.	2.36
	434682	AA827165	Hs.191958	ESTs	2.36
	439737	A1751438	Hs.41271	Homo sapiens mRNA full length insert cDN	2.36
	414108	A1267592	Hs.75761	SFRS protein kinase 1	2.36
40	417900	BE250127	Hs.82906	CDC20 (cell division cycle 20, S. cerevi	2.36
	428046	AW812795	Hs.155381	ESTs, Moderately similar to I38022 hypot	2.36
	448826	A1580252	Hs.293246	ESTs, Weakly similar to putative p150 (H	2.36
	441020	W79263	Hs.35962	ESTs	2.36
	448019	AW947164	Hs.195641	ESTs	2.36
45	431753	X76029	Hs.2841	neuromedin U	2.36
	441703	AW390054	Hs.192843	ESTs	2.36
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	2.36
	418526	BE019020	Hs.85838	solute carrier family 16 (monocarboxylic	2.36
	444478	W07318	Hs.240	M-phase phosphoprotein 1	2.36
50	421878	AA299652	Hs.111496	Homo sapiens cDNA FLJ11643 fs, clone HE	2.35
	428388	AA729827	Hs.101265	Homo sapiens cDNA: FLJ22593 fs, clone H	2.35
	436961	AW375974	Hs.156704	ESTs	2.35
	408194	AA601038	Hs.191797	ESTs	2.35
	438578	AA811244	Hs.164168	ESTs	2.35
55	429183	AB014604	Hs.197955	KIAA0704 protein	2.35
	435663	A1023707	Hs.134273	ESTs	2.35
	430290	A1734110	Hs.136355	ESTs	2.34
	423441	R68649	Hs.278359	absent in melanoma 1 like	2.34
60	453900	AW003582	Hs.226414	ESTs, Weakly similar to ALU8_HUMAN ALU S	2.33
	450378	AW249181	Hs.19954	ESTs, Weakly similar to cDNA EST yk386e1	2.33
	432877	AW974111	Hs.292477	ESTs	2.33
	451928	A1823801	Hs.30315	ESTs	2.33
	426227	U67058	Hs.168102	Human proteinase activated receptor-2 mR	2.33
	418245	AA088767	Hs.83883	transmembrane, prostate androgen induced	2.33
65	415083	A1832683	Hs.27179	Homo sapiens cDNA FLJ12933 fs, clone NT	2.33
	435106	AA100847	Hs.193380	ESTs, Highly similar to AF174600 1 F-box	2.33
	432193	AA372264	Hs.273193	hypothetical protein FLJ10706	2.33
	458531	AA367718	Hs.159083	ESTs	2.33
	449532	W74653	Hs.271593	ESTs	2.33
70	446354	AW449650	Hs.202249	ESTs	2.33
	409703	NM_006187	Hs.56009	2'-5'-oligoadenylate synthetase 3	2.33
	419373	NM_003244	Hs.90077	TG-interacting factor (TALE family homeo	2.32
	435607	W73428	Hs.8750	uncharacterized bone marrow protein BM04	2.32
	405818				2.32
75	423132	AF070647	Hs.124126	Homo sapiens clone 24438 mRNA sequence	2.32
	444371	BE540274	Hs.239	forkhead box M1	2.32
	432675	A1791855	Hs.105884	ESTs	2.32
	411773	NM_006799	Hs.72026	protease, serine, 21 (testisin)	2.31
	448569	BE382657	Hs.21488	signal transducer and activator of trans	2.31
80	434775	AA648983	Hs.212911	ESTs	2.31
	407378	AA299264		gb:EST11752 Uterus Homo sapiens cDNA S	2.31
	442353	BE379594	Hs.49136	ESTs	2.31
	422511	AA158177	Hs.118722	fucosyltransferase 8 (alpha (1,6) fucosy	2.31
	409965	AA079229		gb:zm9504.r1 Stratagene colon HT29 (937	2.31

	421677	H64092	Hs.38282	ESTs	2.31
	419493	AF001212	Hs.90744	proteasome (prosome, macropain) 26S subu	2.31
	424435	AB011167	Hs.145957	KIAA0595 protein	2.30
5	446880	AI811807	Hs.108646	Homo sapiens cDNA FLJ12534 fls, clone NT	2.30
	452795	AW392555	Hs.18878	hypothetical protein FLJ21620	2.30
	452834	AI638627	Hs.105685	ESTs	2.30
	409262	AK000631	Hs.52256	hypothetical protein FLJ20624	2.30
	428125	AA393071	Hs.182579	leucine aminopeptidase	2.30
10	417655	AA780791	Hs.14014	ESTs, Weakly similar to KIAA0973 protein	2.29
	407287	AI578812	Hs.201658	ESTs, Weakly similar to ALU4_HUMAN ALU S	2.29
	428923	BE047698	Hs.188785	ESTs	2.29
	452203	XS7522	Hs.158164	ATP-binding cassette, sub-family B (MDR/	2.29
	409402	AF208234	Hs.695	cystatin B (stefin B)	2.29
15	419359	AL043202	Hs.90073	chromosome segregation 1 (yeast homolog)	2.29
	451999	AW176401	Hs.27424	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	2.29
	400611	AF219139	Hs.87726	KIAA0154 protein; ADP-ribosylation facto	2.29
	436396	AI683487	Hs.299112	Homo sapiens cDNA FLJ11441 fls, clone HE	2.28
	442152	R39246	Hs.239666	Homo sapiens cDNA FLJ13495 fls, clone PL	2.28
20	420931	AF044197	Hs.100431	small inducible cytokine B subfamily (Cy	2.28
	410174	AA306007	Hs.59461	DKFZP434C245 protein	2.28
	425247	NM_005940	Hs.155324	matrix metalloproteinase 11 (stromelysin	2.28
	438170	AI916685	Hs.194601	ESTs	2.28
	445378	AV633564	Hs.226946	ESTs	2.28
	428048	AA705745	Hs.185070	ESTs	2.28
25	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	2.27
	444665	BE613126	Hs.47783	ESTs, Weakly similar to T12540 hypotheti	2.27
	427660	AI741320	Hs.114121	Homo sapiens cDNA: FLJ23228 fls, clone C	2.27
	422128	AW881145		gb:QV0-OT0033-010400-182-m07 OT0033 Homo	2.27
30	433535	AF111106	Hs.3382	protein phosphatase 4, regulatory subuni	2.27
	415857	AA866115	Hs.301646	Homo sapiens cDNA FLJ11381 fls, clone HE	2.27
	421155	H87879	Hs.102267	lysyl oxidase	2.27
	405545			ESTs	2.27
	449467	AW205006	Hs.197042	ESTs	2.27
35	445537	AJ245671	Hs.12844	EGF-like-domain, multiple 6	2.27
	450680	AF131784	Hs.25318	Homo sapiens clone 25194 mRNA sequence	2.26
	423634	AW959908	Hs.1690	heparin-binding growth factor binding pr	2.26
	443868	W88483	Hs.293650	ESTs	2.26
	407742	AF186252	Hs.38084	sulfotransferase family, cytosolic, 1C,	2.26
40	428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	2.26
	432655	AA832195	Hs.292266	ESTs	2.26
	429731	AK001592	Hs.212172	beta,beta-carotene 15,15'-dioxygenase ho	2.26
	400514			ESTs	2.26
	431846	BE019924	Hs.271580	uroplakin 1B	2.26
45	439521	AJ808955	Hs.58248	ESTs	2.26
	426010	AA136563	Hs.1975	Homo sapiens cDNA: FLJ21007 fls, clone C	2.26
	437641	AA811452	Hs.291911	ESTs	2.26
	418982	AJ348838	Hs.13073	ESTs	2.26
	411393	AW797437	Hs.69771	B-factor, properdin	2.26
50	414809	AI434699	Hs.77356	transferrin receptor (p90, CD71)	2.25
	419488	AA316241	Hs.90691	nucleophosmin/nucleoplasm 3	2.25
	434540	NM_016045	Hs.5184	TH1 drosophila homolog	2.25
	449962	AA004879	Hs.187820	ESTs	2.25
	410196	AI936442	Hs.59838	hypothetical protein FLJ10808	2.25
55	456844	AI264155	Hs.152981	CDP-diacylglycerol synthase (phosphatida	2.25
	414368	W70171	Hs.75939	uridine monophosphate kinase	2.25
	408353	BE439838	Hs.44298	hypothetical protein	2.25
	439223	AW238299	Hs.23945	ESTs	2.25
	448753	AL048858	Hs.224355	ESTs, Weakly similar to A39650 protein k	2.25
60	428479	Y00272	Hs.184572	cell division cycle 2, G1 to S and G2 to	2.24
	432403	AA550815	Hs.124840	ESTs	2.24
	424971	AA479005	Hs.154036	tumor suppressing subtransferable candid	2.24
	432673	AB028859	Hs.278605	ER-associated DNAJ; ER-associated Hsp40	2.24
	446887	AI346656	Hs.156652	Homo sapiens cDNA: FLJ22800 fls, clone K	2.24
65	452833	BE559681	Hs.30736	KIAA0124 protein	2.24
	409432	D49372	Hs.54460	small inducible cytokine subfamily A (Cy	2.24
	422039	BE567832	Hs.82148	hypothetical protein	2.24
	429925	NM_000786	Hs.226213	cytochrome P450, 51 (lanosterol 14-alpha	2.24
	445413	AA151342	Hs.12677	CGI-147 protein	2.23
70	423645	AI215632	Hs.147487	ESTs	2.23
	447532	AK000614	Hs.18791	hypothetical protein FLJ20607	2.23
	423515	AA327017	Hs.162204	ESTs	2.23
	444743	AA045648	Hs.11817	nudix (nucleoside diphosphate linked moi	2.23
	434518	H56995	Hs.37372	Homo sapiens DNA binding peptide mRNA, p	2.23
75	435602	AF217515	Hs.283532	uncharacterized bone marrow protein BM03	2.23
	449974	AW970948	Hs.269403	ESTs	2.23
	424927	AW973666	Hs.153850	hypothetical protein C321D2.4	2.23
	457982	AW856093	Hs.183617	ESTs	2.23
	414420	AA043424	Hs.76095	immediate early response 3	2.23
80	449019	AI949095	Hs.67776	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.23
	431840	AA534908	Hs.2860	POU domain, class 5, transcription facto	2.23
	452930	AW195285	Hs.194097	ESTs	2.23
	436391	AJ227892	Hs.146274	ESTs	2.23
	439186	AI697274	Hs.6487	Xq28, 2000bp sequence contig, ORF	2.23

	427254	AL121523	Hs.97774	ESTs	2.22
	424517	AJ539443	Hs.137447	Homo sapiens cDNA FLJ12169 fis, clone MA	2.22
	414732	AW410976	Hs.77152	minichromosome maintenance deficient (S.	2.22
5	411835	U29343	Hs.72550	hyaluronan-mediated motility receptor (R	2.22
	427647	W19744	Hs.180059	Homo sapiens cDNA FLJ20653 fis, clone KA	2.22
	438223	AA781171		gb:aj24d05.s1 Soares_testis_NHT Homo sap	2.22
	434504	AJ887341	Hs.121590	Homo sapiens cDNA FLJ12827 fis, clone NT	2.22
	450149	AW969781	Hs.293440	ESTs, Moderately similar to ZIC2 protein	2.22
10	439211	AJ890347	Hs.271923	Homo sapiens cDNA: FLJ22785 fis, clone K	2.22
	401519				2.22
	441794	AW197794	Hs.253338	ESTs	2.22
	412108	AA100293	Hs.185043	ESTs	2.22
	431849	AJ670823	Hs.85573	Homo sapiens mRNA; cDNA DKFZp566N034 (fr	2.22
15	444969	AJ203334	Hs.160628	ESTs	2.21
	408901	AK001330	Hs.48855	hypothetical protein FLJ10468	2.21
	434423	NM_006769	Hs.3844	LIM domain only 4	2.21
	439328	W07411	Hs.118212	ESTs, Moderately similar to ALU3_HUMAN A	2.21
	400021			AFFX control: STAT1	2.21
20	432140	AK000404	Hs.272688	hypothetical protein FLJ20397	2.21
	434170	AA828509	Hs.122329	ESTs	2.21
	423453	AW450737	Hs.128791	CGI-09 protein	2.21
	428438	NM_001955	Hs.2271	endothelin 1	2.21
	433102	AJ343966	Hs.158528	ESTs	2.21
25	421470	R27496	Hs.1378	annexin A3	2.21
	425499	T82489		gb:yc0309.r1 Stratagene lung (937210) H	2.21
	438280	AW015534	Hs.217493	annexin A2	2.21
	440381	AA917808	Hs.190495	ESTs	2.20
	453779	N35187	Hs.43388	ESTs	2.20
30	433627	AF078866	Hs.284296	Homo sapiens cDNA: FLJ22993 fis, clone K	2.20
	417944	AU077196	Hs.82985	collagen, type V, alpha 2	2.20
	452299	AW206330	Hs.73239	hypothetical protein FLJ10901	2.20
	422689	AW856665		gb:RC3-CT0297-290100-013-d03 CT0297 Homo	2.20
	448457	H65629	Hs.245997	ESTs	2.20
35	416221	BE513171	Hs.79088	mitochondrial ribosomal protein L3	2.20
	426125	X87241	Hs.166994	FAT tumor suppressor (Drosophila) homolog	2.20
	430603	AA148164	Hs.247280	HBV associated factor	2.20
	425274	BE281191	Hs.155462	minichromosome maintenance deficient (mi	2.20
	452679	Z42387	Hs.4299	Homo sapiens cDNA: FLJ20965 fis, clone A	2.20
40	410619	BE512730	Hs.65114	keratin 18	2.20
	424332	AA338919	Hs.101615	ESTs	2.20
	442490	AW965078	Hs.30212	thyroid receptor interacting protein 15	2.20
	418661	NM_001949	Hs.1189	Human mRNA for KIAA0075 gene, partial cd	2.20
	419341	N71463	Hs.118888	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.20
45	427920	Z11502	Hs.181107	annexin A13	2.19
	413879	AA132961	Hs.212533	Homo sapiens cDNA: FLJ22572 fis, clone H	2.19
	419752	AA249573	Hs.152618	ESTs	2.19
	441435	AW137772	Hs.185980	ESTs	2.19
	413095	AA494359	Hs.30715	ESTs	2.19
50	403208				2.19
	422596	AF063811	Hs.118633	2'-5'-oligoadenylate synthetase-like	2.19
	444261	AA298958	Hs.10724	MDS023 protein	2.19
	419474	AW968619	Hs.155849	ESTs	2.19
	453883	AJ638516	Hs.77448	aldehyde dehydrogenase 4 (glutamate gamm	2.18
55	423401	NM_001992	Hs.128087	coagulation factor II (thrombin) recepto	2.18
	453450	AW979627	Hs.89474	ADP-ribosylation factor 6	2.18
	440250	AA876179	Hs.134650	ESTs	2.18
	444334	BE296785	Hs.10848	KIAA0187 gene product	2.18
	437616	AJ797163	Hs.207954	ESTs	2.18
60	451807	WS2854	Hs.27099	DKFZP564J0863 protein	2.18
	430441	BE398091	Hs.6880	DKFZP434D156 protein	2.18
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	2.18
	411678	AJ907114	Hs.71465	squalene epoxidase	2.18
	453735	AK066629	Hs.125073	ESTs	2.18
65	450499	AA235207	Hs.250456	hypothetical protein DKFZp762F2011	2.18
	452291	AF015592	Hs.28853	CDC7 (cell division cycle 7, S. cerevisi	2.18
	421532	AW138207	Hs.146170	hypothetical protein FLJ22969	2.18
	444342	NM_014398	Hs.10887	similar to lysosome-associated membrane	2.18
	451099	RS2795	Hs.25954	interleukin 13 receptor, alpha 2	2.18
70	444207	AJ565004	Hs.79572	cathepsin D (lysosomal aspartyl protease	2.18
	425873	NM_013390	Hs.160417	transmembrane protein 2	2.17
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	2.17
	449437	AJ702038	Hs.100057	Homo sapiens cDNA: FLJ22902 fis, clone K	2.17
	446995	AJ355012		gb:qu16d10.x1 NCJ_CGAP_Ov23 Homo sapiens	2.17
75	431548	AJ834273	Hs.9711	Homo sapiens cDNA FLJ13018 fis, clone NT	2.17
	411127	AA668995	Hs.218329	hypothetical protein	2.17
	439961	AA857451	Hs.269696	ESTs	2.17
	429125	AA446854	Hs.271004	ESTs	2.17
	407103	AA424881	Hs.256301	ESTs	2.17
80	435990	AJ015862	Hs.131793	ESTs	2.17
	415116	AA160363	Hs.269956	ESTs	2.17
	440052	AJ633744	Hs.195648	ESTs	2.17
	423961	D13665	Hs.136348	osteoblast specific factor 2 (fascilin	2.17
	431070	AW408164	Hs.249184	transcription factor 19 (SC1)	2.16

	443599	AI079559	Hs.134125	ESTs	2.16
	423623	AB011117	Hs.129943	KIAA054S protein	2.16
	427258	AA400091	Hs.39421	ESTs	2.16
5	418113	AI272141	Hs.83484	SRY (sex determining region Y)-box 4	2.16
	450835	BE262773	Hs.25594	hypothetical protein FLJ10767	2.16
	428698	AA852773	Hs.297939	ESTs, Weakly similar to T17344 hypothet	2.16
	421408	AI688223	Hs.104114	H.sapiens HCG 1 mRNA	2.16
	449057	AB037784	Hs.22941	KIAA1363 protein	2.16
10	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKFZp564N1662 (I	2.16
	443552	N65982	Hs.109434	ESTs	2.16
	448153	Y10805	Hs.20521	HMT1 (hnRNP methyltransferase, S. cerevi	2.16
	424653	AW977534	Hs.151469	calcium/calmodulin-dependent serine prot	2.16
	431341	AA307211	Hs.251531	proteasome (prosome, macropain) subunit,	2.16
15	452865	AI924048	Hs.119567	ESTs	2.16
	432789	D26361	Hs.3104	KIAA0042 gene product	2.16
	438580	AA811262	Hs.299202	ESTs	2.16
	422192	AA305159	Hs.113019	fts485	2.15
	425607	U09860	Hs.158333	protease, serine, 7 (enterokinase)	2.15
20	447289	AW247017	Hs.36978	melanoma antigen, family A, 3	2.15
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	2.15
	441021	AW578716	Hs.7644	H1 histone family, member 2	2.15
	442432	BE093589	Hs.38178	Homo sapiens cDNA: FLJ23468 fts, clone H	2.15
	426471	M22440	Hs.170009	transforming growth factor, alpha	2.15
25	431941	AK000106	Hs.272227	Homo sapiens cDNA FLJ20099 fts, clone CO	2.15
	414761	AU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	2.15
	447033	AI357412	Hs.157601	ESTs	2.15
	410407	X66839	Hs.63287	carbonic anhydrase IX	2.15
30	446077	BE251048	Hs.22579	Homo sapiens clone CDABP0036 mRNA sequen	2.15
	420900	AL045633	Hs.44269	ESTs	2.15
	411975	AJ916058	Hs.144583	ESTs, Weakly similar to gag [H.sapiens]	2.15
	419239	AA468183	Hs.184598	Homo sapiens cDNA: FLJ23241 fts, clone C	2.15
	449571	AW016812	Hs.200266	ESTs	2.15
	452721	AJ269529	Hs.30377	Homo sapiens EST from clone 470080, full	2.15
35	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA sequence	2.14
	410664	NM_006033	Hs.65370	lipase, endothelial	2.14
	435730	AB020635	Hs.4984	KIAA0828 protein	2.14
	452835	AK001269	Hs.30738	hypothetical protein FLJ10407	2.14
	452092	BE245374	Hs.27842	hypothetical protein FLJ11210	2.14
40	401708				2.14
	411400	AA311919	Hs.69851	GAR1 protein	2.14
	448526	AB028948	Hs.21361	KIAA1023 protein	2.14
	421175	AJ878099	Hs.102397	GIOT-3 for gonadotropin inducible transc	2.14
	412338	AA151527	Hs.69485	Homo sapiens cDNA FLJ12436 fts, clone NT	2.14
45	420894	AA744597	Hs.88854	ESTs	2.14
	409235	AA188827	Hs.7988	ESTs, Weakly similar to endo-alpha-D-man	2.14
	412870	N22788	Hs.82407	Homo sapiens HSPC296 mRNA, partial cds	2.14
	447760	AI431328	Hs.291179	ESTs, Weakly similar to topoisomerase I	2.14
	413511	AI827178	Hs.75412	Arginine-rich protein	2.13
50	432945	AL043683	Hs.271357	ESTs, Weakly similar to unnamed protein	2.13
	418592	X99226	Hs.284153	Fanconi anemia, complementation group A	2.13
	441790	AW294909	Hs.132208	ESTs	2.13
	425298	AK000209	Hs.155556	hypothetical protein FLJ20202	2.13
55	450956	AW193531	Hs.205647	ESTs, Moderately similar to ALU1_HUMAN A	2.13
	419569	AI971651	Hs.91143	jagged 1 (Alagille syndrome)	2.13
	421508	NM_004833	Hs.105115	absent in melanoma 2	2.13
	453975	AW009808	Hs.270829	ESTs	2.13
	413670	AB000115	Hs.75470	hypothetical protein, expressed in osteo	2.13
	422783	AA598956	Hs.120439	ethanolamine kinase	2.13
60	444542	AI161293	Hs.146862	ESTs, Weakly similar to KIAA0525 protein	2.13
	410418	D31382	Hs.63325	transmembrane protease, serine 4	2.13
	419791	AI579909	Hs.105104	ESTs	2.13
	414860	BE255593	Hs.77502	methionine adenosyltransferase II, alpha	2.13
	425860	L28339	Hs.1964	solute carrier family 5 (sodium/glucose	2.13
65	414839	X83692	Hs.77482	DNA (cytosine-5-)-methyltransferase 1	2.13
	437050	AA768420	Hs.291606	ESTs	2.13
	430217	N47863	Hs.180450	ribosomal protein S24	2.13
	420923	AF097021	Hs.273321	differentially expressed in hematopoiet	2.12
	409012	AL117435	Hs.49725	DKFZP434I216 protein	2.12
70	450645	AL117441	Hs.25264	DKFZP434N126 protein	2.12
	431322	AW970622		gb:EST382704 MAGE resequences, MAGK Homo	2.12
	451356	AA748418	Hs.164577	ESTs	2.12
	429534	AW976987	Hs.163327	ESTs	2.12
	428365	AA295331	Hs.183861	Homo sapiens cDNA FLJ20042 fts, clone CO	2.12
75	441495	AW294603	Hs.127039	ESTs	2.12
	443564	AI921685	Hs.199713	ESTs	2.12
	410839	NM_006849	Hs.66581	protein disulfide isomerase	2.12
	433640	AW390125	Hs.240443	Homo sapiens cDNA: FLJ23538 fts, clone L	2.12
	442947	R40800	Hs.21303	ESTs	2.12
80	414987	AA524394	Hs.165544	ESTs	2.12
	450510	AA010056	Hs.242998	ESTs	2.12
	427475	AA403151	Hs.191605	ESTs	2.12
	444670	H58373	Hs.37494	ESTs	2.12
	452099	BE612992	Hs.27931	hypothetical protein FLJ10607 similar to	2.12

	433748	R12244		gb:yl33c12.r1 Soares fetal liver spleen	2.12
	415138	C18356	Hs.78045	tissue factor pathway inhibitor 2	2.11
	438138	R98299	Hs.177502	ESTs	2.11
5	414788	X78342	Hs.77313	cyclin-dependent kinase (CDC2-like) 10	2.11
	415474	NM_014252	Hs.78457	solute carrier family 25 (mitochondrial	2.11
	416472	AA180756	Hs.193094	ESTs, Moderately similar to ALU4_HUMAN A	2.11
	412490	AW803564	Hs.288850	Homo sapiens cDNA: FLJ22528 fs, clone H	2.11
	410718	AJ920783	Hs.191435	ESTs	2.11
10	425811	AL039104	Hs.159557	karyopherin alpha 2 (RAG cohort 1, impor	2.11
	433344	AI741506	Hs.186753	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.11
	447197	R36075		gb:yh88b01.s1 Soares placenta Nb2HP Homo	2.11
	431621	AW292329	Hs.163481	ESTs	2.11
	418522	AA605038	Hs.7149	Homo sapiens cDNA: FLJ21950 fs, clone H	2.11
15	433849	BE465884	Hs.280728	ESTs	2.11
	438038	AI732629	Hs.194161	ESTs, Weakly similar to TAZR HUMAN, BETA	2.11
	422032	AA476966	Hs.110857	polymerase (RNA) III (DNA directed) poly	2.11
	409717	AW452871	Hs.56043	CGI-115 protein	2.11
	410566	AA373210	Hs.43047	Homo sapiens cDNA FLJ13585 fs, clone PL	2.11
20	445837	AQ61700	Hs.145544	ESTs	2.11
	414334	AA824298	Hs.21331	hypothetical protein FLJ10036	2.11
	438326	BE085236	Hs.181244	major histocompatibility complex, class	2.10
	423880	BE278111	Hs.134200	DKFZP564C186 protein	2.10
	421574	AJ000152	Hs.105924	defensin, beta 2	2.10
25	437103	AW139408	Hs.152940	ESTs	2.10
	435550	AJ224456	Hs.4934	H.sapiens polyA site DNA	2.10
	450747	AI064821	Hs.48306	ESTs, Highly similar to EWS_HUMAN RNA-BI	2.10
	437033	AW248364	Hs.5409	RNA polymerase I subunit	2.10
	417640	D30857	Hs.82353	protein C receptor, endothelial (EPCR)	2.10
30	431120	AA492588		gb:mg99c08.s1 NCI_CGAP_Thy1 Homo sapiens	2.10
	430510	AW162916	Hs.241576	hypothetical protein PRO2577	2.10
	429669	BE185499	Hs.2471	KIAA0020 gene product	2.10
	407881	AW072003	Hs.40968	heparan sulfate (glucosamine) 3-O-sulfat	2.10
	436124	AA705012	Hs.269584	ESTs	2.10
35	436415	BE265254	Hs.5181	proliferation-associated 2G4, 38kD	2.10
	451121	AW973795	Hs.128927	Homo sapiens cDNA FLJ13903 fs, clone TH	2.10
	453968	AA847843	Hs.62711	ESTs	2.10
	437549	AA759149		gb:ah70e03.s1 Soares_testis_NHT Homo sap	2.10
	407887	AA579668	Hs.41072	serine (or cysteine) proteinase inhibito	2.10
40	447720	AL038765	Hs.161304	ESTs	2.09
	434769	AA648884	Hs.134278	Homo sapiens cDNA FLJ12676 fs, clone NT	2.09
	429743	AA804398	Hs.288995	hypothetical protein FLJ20813	2.09
	447815	AI432199	Hs.247084	ESTs	2.09
	441675	AI914329	Hs.5461	ESTs	2.09
45	434274	AA828539	Hs.116252	ESTs, Moderately similar to ALU1_HUMAN A	2.09
	411571	AA122393	Hs.70811	hypothetical protein FLJ20516	2.09
	442525	AF150282	Hs.145945	ESTs	2.09
	423750	AF165883	Hs.132415	prefoldin 2	2.09
	449199	AI990122	Hs.196988	ESTs	2.09
50	415363	AI670947	Hs.78406	phosphatidylinositol-4-phosphate 5-kinas	2.09
	432543	AA552690	Hs.152423	Homo sapiens cDNA: FLJ21274 fs, clone C	2.09
	418462	BE001596	Hs.85266	integrin, beta 4	2.09
	432093	H28383		gb:yl52c03.r1 Soares breast 3NbHBst Homo	2.09
	407862	BE548267	Hs.50724	Homo sapiens cDNA FLJ10934 fs, clone OV	2.09
55	434442	AA737415	Hs.152826	ESTs	2.09
	442671	AI005668	Hs.134779	EST	2.09
	428771	AB028992	Hs.193143	KIAA1069 protein	2.09
	430335	D80007	Hs.239499	KIAA0185 protein	2.08
	425087	R62424	Hs.126059	ESTs	2.08
60	412530	AA766268	Hs.266273	Homo sapiens cDNA FLJ13346 fs, clone OV	2.08
	443450	N66045	Hs.133529	ESTs	2.08
	418753	BE217818	Hs.87016	Homo sapiens cDNA: FLJ22938 fs, clone K	2.08
	432204	AI916132	Hs.121593	Homo sapiens cDNA FLJ13123 fs, clone NT	2.08
	439018	AW300887	Hs.26638	ESTs, Weakly similar to unnamed protein	2.08
65	418300	AI433074	Hs.86682	Homo sapiens cDNA: FLJ21578 fs, clone C	2.08
	431628	AF146277	Hs.265561	CD2-associated protein	2.08
	446528	AU076640	Hs.15243	nucleolar protein 1 (120kD)	2.08
	432284	AA532807	Hs.105822	ESTs	2.08
	411372	AI147861	Hs.213289	low density lipoprotein receptor (famili	2.08
70	459319	NM_000059		gb:Homo sapiens breast cancer 2, early o	2.08
	408730	AV660717	Hs.47144	DKFZP586N0819 protein	2.08
	443607	AI452512	Hs.134069	ESTs	2.08
	422058	AA862231		gb:oe13g03.s1 NCI_CGAP_Ov2 Homo sapiens	2.08
	409220	BE243323	Hs.51233	tumor necrosis factor receptor superfam	2.08
75	429504	X99133	Hs.204238	lipocalin 2 (oncogene 24p3)	2.08
	409686	AK000002	Hs.55879	Homo sapiens mRNA for FLJ00036 protein,	2.08
	438394	BE379623	Hs.27693	CGI-124 protein	2.08
	413092	AA126856	Hs.118665	ESTs	2.08
	413715	AW851121	Hs.75497	Homo sapiens cDNA: FLJ22139 fs, clone H	2.08
80	423020	AA383092	Hs.1608	replication protein A3 (14kD)	2.07
	438378	AW970529	Hs.86434	Homo sapiens cDNA: FLJ21816 fs, clone H	2.07
	453379	AA035261	Hs.61753	ESTs	2.07
	432125	AW972667	Hs.287510	Homo sapiens cDNA FLJ12300 fs, clone MA	2.07
	449370	AK002114	Hs.23495	hypothetical protein FLJ11252	2.07

	449318	AW236021	Hs.108788	ESTs, Weakly similar to zeste [D.melanog	2.07
	450096	AI682088	Hs.223368	ESTs	2.07
	454011	M31008	Hs.37009	alkaline phosphatase, intestinal	2.07
5	427876	AI494291	Hs.111977	ESTs	2.07
	422901	R81936	Hs.121576	aspartate beta-hydroxylase	2.07
	419235	AW470411	Hs.288433	neurotrophin	2.07
	449207	AL044222	Hs.23255	nucleoporin 155kD	2.07
	408243	Y00787	Hs.624	interleukin 8	2.07
	415652	T79213	Hs.272073	ESTs	2.07
10	446548	BE167687	Hs.156628	ESTs	2.07
	411765	H43346		gb:yp09a04.r1 Soares breast 3NbHBst Homo	2.07
	423472	AF041260	Hs.129057	breast carcinoma amplified sequence 1	2.07
	436211	AK001581	Hs.80961	polymerase (DNA directed), gamma	2.07
	456157	AW979153		gb:EST391263 MAGE resequences, MAGP Homo	2.06
15	407143	C14076	Hs.248968	EST	2.06
	454269	AI961060	Hs.296411	ESTs, Moderately similar to KF1A_HUMAN K	2.06
	432440	X63587	Hs.2998	sucrose-isomaltase	2.06
	410668	BE379794	Hs.65403	hypothetical protein	2.06
20	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	2.06
	450434	AA166950	Hs.18645	ESTs, Weakly similar to partial CDS [C.e	2.06
	439832	T81829	Hs.14870	ESTs	2.06
	456264	AW974175	Hs.105251	ESTs	2.06
	431201	AA678405	Hs.8854	Human transcription unit PVT gene, exons	2.06
25	445021	AK002025	Hs.12251	Homo sapiens cDNA FLJ111163 fs, clone PL	2.06
	438714	AA814859	Hs.294112	ESTs	2.06
	445318	AW500652	Hs.200885	ESTs	2.06
	439951	AI347067	Hs.124638	ESTs	2.06
	433681	AI004377	Hs.290360	Homo sapiens cDNA FLJ13027 fs, clone NT	2.06
30	428307	W27393	Hs.183648	protein tyrosine phosphatase, receptor I	2.06
	426874	N67325	Hs.247132	ESTs	2.06
	451295	AI557212	Hs.17132	ESTs	2.06
	432584	AA928829	Hs.47099	Homo sapiens cDNA: FLJ21212 fs, clone C	2.06
	433027	AF191018	Hs.279923	putative nucleotide binding protein, est	2.06
35	433718	AA608808	Hs.225118	ESTs	2.06
	429412	NM_006235	Hs.2407	POU domain, class 2, associating factor	2.06
	426235	AI631964	Hs.34447	ESTs	2.06
	449026	BE500946	Hs.209105	ESTs	2.06
	437016	AU076916	Hs.5398	guanine monophosphate synthetase	2.06
40	400019			AFFX control: STAT1	2.06
	408873	AL046017	Hs.23247	ESTs	2.06
	442547	AA306997	Hs.268362	ESTs, Weakly similar to hypothetical pro	2.06
	455778	BE068746		gb:CM2-BT0693-210300-123-d09 BT0693 Homo	2.06
45	439975	AW328081	Hs.6817	Homo sapiens putative oncogene protein m	2.06
	433037	NM_014158	Hs.279938	HSPC067 protein	2.06
	440086	NM_005402	Hs.288757	v-rat simian leukemia viral oncogene hom	2.06
	436414	BE264633	Hs.143638	WD repeat domain 4	2.05
	411770	NM_014278	Hs.71992	heat shock protein (hsp110 family)	2.05
	407293	AA602234	Hs.270551	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.05
50	409459	D86407	Hs.54481	low density lipoprotein receptor-related	2.05
	436238	AK002163	Hs.301724	ESTs, Highly similar to unnamed protein	2.05
	400517	AF242388	Hs.149585	lensin	2.05
	439943	AW083789	Hs.124620	ESTs	2.05
	421904	BE143533	Hs.109309	hypothetical protein FLJ20035	2.05
55	417850	AA215724	Hs.82741	primase, polypeptide 1 (49kD)	2.05
	417491	AW376842	Hs.1085	guanylate cyclase 2C (heat stable entero	2.05
	453775	NM_002916	Hs.35120	replication factor C (activator 1) 4 (37	2.05
	435525	AI831297	Hs.123310	ESTs	2.05
	412627	BE391959	Hs.74276	chloride intracellular channel 1	2.05
60	439702	AW085525	Hs.134182	ESTs	2.05
	440006	AK000517	Hs.6844	hypothetical protein FLJ20510	2.05
	432979	AA573263	Hs.120860	ESTs	2.05
	417308	H60720	Hs.81892	KIAA0101 gene product	2.05
	432925	AA878324	Hs.192734	ESTs	2.05
65	446311	AW007294	Hs.149795	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.05
	427871	AW992405	Hs.59822	ESTs, Weakly similar to unknown [H.sapie	2.05
	453804	AA300204	Hs.35276	KIAA0852 protein	2.05
	449339	T86420	Hs.272139	ESTs	2.05
	455666	BE065813		gb:RC2-BT0318-110100-012-a08 BT0318 Homo	2.05
70	417819	AI253112	Hs.133540	ESTs	2.04
	427747	AW411425	Hs.180655	serine/threonine kinase 12	2.04
	415009	C75253	Hs.220950	ESTs	2.04
	437829	AI358522	Hs.270188	ESTs	2.04
	435381	AW136397	Hs.247572	ESTs	2.04
75	439778	AL109729	Hs.18948	ESTs, Highly similar to HPS1_HUMAN PROTE	2.04
	428753	AW939252	Hs.192927	hypothetical protein FLJ20251	2.04
	446475	AI908188	Hs.209245	ESTs	2.04
	431394	AK000692	Hs.252351	HERV-H LTR-associating 2	2.04
	423701	AA329856	Hs.143022	ESTs	2.04
80	430680	AW138724	Hs.168974	ESTs, Highly similar to ALU7_HUMAN ALU S	2.04
	422369	AF005216	Hs.115541	Janus kinase 2 (a protein tyrosine kinas	2.04
	432481	AW451645	Hs.151504	Homo sapiens cDNA FLJ11973 fs, clone HE	2.04
	443746	AW861379	Hs.160602	ESTs	2.04
	400792	AA635062	Hs.50094	Homo sapiens mRNA: cDNA DKFZp43400515 (I	2.04



5	432393	AW205863	Hs.133988	ESTs, Weakly similar to I52825 gene MAC2	2.04
	430785	Z30201		gb:HHEA22G Atrium cDNA library Human hea	2.04
	428343	AL043021	Hs.12705	ESTs, Weakly similar to plakophilin 2b	2.04
	419329	AY007220	Hs.288998	S100-type calcium binding protein A14	2.04
	452488	N74921	Hs.184389	ESTs	2.04
10	403485				2.04
	413313	NM_002047	Hs.75260	glycyl-tRNA synthetase	2.04
	407634	AW016569	Hs.301280	ESTs, Highly similar to AF241831 1 intra	2.04
	433326	AJ379486	Hs.159430	ESTs	2.03
	451129	BE072881		gb:RC2-BT0548-200300-012-e09 BT0548 Homo	2.03
15	429165	AW009886	Hs.118258	prostate cancer associated protein 1	2.03
	422963	M79141	Hs.13234	ESTs	2.03
	418684	U92987	Hs.87246	Bcl-2 binding component 3	2.03
	407824	AA147884	Hs.9812	ESTs	2.03
	434551	BE387162	Hs.280858	ESTs, Highly similar to XPB_HUMAN DNA-RE	2.03
20	440246	W52010	Hs.191379	ESTs	2.03
	444006	BE395085	Hs.10086	type I transmembrane protein Fn14	2.03
	431301	AA502384	Hs.151529	ESTs	2.03
	452705	H49805	Hs.246005	ESTs	2.03
	421724	AB037832	Hs.107287	KIAA1411 protein	2.03
25	420637	AW976153		gb:EST388262 MAGE resequences, MAGN Homo	2.03
	450200	AW975625	Hs.173088	ESTs	2.03
	447474	AW614220	Hs.189402	ESTs	2.03
	418852	BE537037	Hs.273294	hypothetical protein FLJ20069	2.03
	445019	AJ205540	Hs.281295	ESTs	2.03
30	435202	AJ971313	Hs.170204	KIAA0551 protein	2.03
	431842	NM_005764	Hs.271473	epithelial protein up-regulated in cardi	2.03
	436198	AK001125	Hs.300922	Homo sapiens cDNA FLJ10263 fs, clone HE	2.03
	440773	AA352702	Hs.37747	hypothetical protein FLJ12484	2.03
	443425	AJ058776	Hs.133397	ESTs	2.03
35	454166	AW993356	Hs.2055	ubiquitin-activating enzyme E1 (A159T an	2.03
	407975	X89426	Hs.41716	endothelial cell-specific molecule 1 (NO	2.03
	428299	AL038004	Hs.29419	ESTs	2.03
	418735	N48769	Hs.44609	ESTs	2.03
	442053	R35343	Hs.24968	Human DNA sequence from clone RP1-233G16	2.03
40	415757	AA830854	Hs.187810	ESTs	2.03
	432559	AW452948	Hs.257631	ESTs	2.03
	425912	AL137629	Hs.162189	serine/threonine kinase with Dbl- and pl	2.02
	419395	BE268326	Hs.90280	5-aminimidazole-4-carboxamide ribonucle	2.02
	417576	AA339449	Hs.82285	phosphoribosylglycinamide formyltransfer	2.02
45	418559	AA225048	Hs.104207	ESTs	2.02
	410855	X97795	Hs.66718	RAD54 (S.cerevisiae)-like	2.02
	433906	AI167816	Hs.43355	ESTs	2.02
	422072	AB018255	Hs.111138	KIAA0712 gene product	2.02
	419546	AA244199		gb:nc06c05.s1 NCI_CGAP_Pr1 Homo sapiens	2.02
50	446229	AI744964	Hs.14449	KIAA1609 protein	2.02
	450516	AA902656	Hs.21943	NIF3 (Ngg1 interacting factor 3, S.pombe	2.02
	431721	AB032996	Hs.268044	KIAA1170 protein	2.02
	419807	R77402		gb:yi75f11.s1 Soares placenta NbZHP Homo	2.02
	438192	AI859065	Hs.16808	ESTs, Weakly similar to paraplegin-like	2.02
55	401866				2.02
	443129	R16075	Hs.21668	ESTs	2.02
	426991	AK001536	Hs.285803	Homo sapiens cDNA FLJ12852 fs, clone NT	2.01
	414731	AI890434	Hs.77135	Homo sapiens mRNA: cDNA DKFZp586A191 (tr	2.01
	424783	AA913909	Hs.153088	TATA box binding protein (TBP)-associate	2.01
60	413293	AL047483	Hs.75270	GTP-binding protein homologous to Saccha	2.01
	435787	AW162767	Hs.100914	hypothetical protein FLJ10352	2.01
	422599	BE387202	Hs.118638	non-metastatic cells 1, protein (NM23A)	2.01
	442660	AW138174	Hs.130651	ESTs	2.01
	456553	AA721325	Hs.189058	ESTs, Weakly similar to cAMP-regulated g	2.01
65	431630	NM_002204	Hs.265829	integrin, alpha 3 (antigen CD49C, alpha	2.01
	431300	AA502348		gb:ne26b03.s1 NCI_CGAP_Co3 Homo sapiens	2.01
	443180	R15875	Hs.70945	ESTs	2.01
	450914	AI743761	Hs.142528	ESTs	2.01
	448275	BE514434	Hs.20830	synaptic Ras GTPase activating protein 1	2.01
70	405484				2.01
	436469	AK001455	Hs.5198	Down syndrome critical region gene 2	2.01
	451273	NM_014811	Hs.26163	KIAA0649 gene product	2.01
	439696	W95298	Hs.171882	ESTs	2.01
	432378	AI493046	Hs.146133	ESTs	2.01
75	417975	AA641836	Hs.30085	Homo sapiens cDNA: FLJ23186 fs, clone L	2.01
	453665	AA626250	Hs.181165	eukaryotic translation elongation factor	2.01
	419981	AA897581	Hs.128773	ESTs	2.01
	445808	AV655234	Hs.298083	ESTs	2.01
	435767	H73505	Hs.117874	ESTs	2.01
80	430466	AF052573	Hs.241517	polymerase (DNA directed), theta	2.01
	452747	BE153855	Hs.81460	ESTs	2.01
	422790	AA809875	Hs.25933	ESTs	2.01
	443303	U67319	Hs.9216	caspase 7, apoptosis-related cysteine pr	2.01
	433929	AI375499	Hs.27379	ESTs	2.01
	410008	AA079552		gb:zm20h12.s1 Stratagene pancreas (93720	2.01
	448954	AB014564	Hs.22616	KIAA0684 protein	2.00
	440774	AJ420611	Hs.127832	ESTs	2.00

5	451351	AW058261	Hs.168213	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.00
	442961	BE614474	Hs.289074	Homo sapiens cDNA FLJ13985 fis, clone Y7	2.00
	424420	BE614743	Hs.146688	prostaglandin E synthase	2.00
	407154	H79677		gb:yu76g10.s1 Soares fetal liver spleen	2.00
	410240	AL157424	Hs.61289	synaptotagmin 2	2.00
	426830	AA385751	Hs.160392	ESTs	2.00
	435014	BE560898	Hs.10026	ribosomal protein L17 isolog	2.00
	408620	AI918693	Hs.81848	RAD21 (S. pombe) homolog	2.00
	432829	W60377	Hs.57772	ESTs	2.00
10	406752	AI285598	Hs.217493	annexin A2	2.00

15	TABLE 40A:		
	Pkey:	Unique Eos probeset identifier number	
	CAT number:	Gene cluster number	
	Accession:	Genbank accession numbers	

20	Pkey	CAT number	Accession
	408690	107490_1	AW864542 AA056567 AW882724
	409965	116301_1	AA079229 AA079201 AA078874
	410008	116812_1	AA079552 BE142525 BE142527
	410145	1178960_1	AW886300 AW887902 AW887893 AW886291 AW592641
25	411765	125700_1	H43346 AA248302 AA095182
	416713	1610889_1	T70174 H79244 T69850 H79151
	418546	176677_1	AA224827 T59708 T59843 BE156903
	419546	185766_1	AA244199 AA244272 H57440
	419807	188252_1	R77402 AA262462 AA250988 R06794
30	420637	195241_1	AW976153 AA278945 AA747691
	422058	210815_1	AA852231 AA659033 AA302799 AA302798
	422128	211994_1	AW881145 AA490718 M85637 AA304575 T06067 AA331991
	422689	219896_1	AW856665 AA315006 AW954733
	425499	252539_1	T62489 T62634 AA828581 AA358569
35	430704	322217_1	AW813091 AW206655 AA484440
	430785	323486_1	Z30201 AA486132 T72025
	431120	328264_1	AA492588 AA492498 AA492571
	431300	331217_1	AA502346 BE159863
	431322	331543_1	AW970622 AA503009 AA502998 AA502989 AA502805 T92188
40	432009	34025_1	AL137424 BE007148 T52277
	432093	341283_1	H28383 AW972670 H28359 AA525808
	433748	37385_1	R12244 H71290 AI110858 AF090916 AF075357 AA011531
	434414	38585_1	AI798376 S46400 AW811617 AW811616 W00557 BE142245 AW858232 AW861851 AW858362 AA232351 AA218567 AA055556 AW858231
45			AW857541 AW814172 H66214 AW814398 AF134164 AA243093 AA173345 AA199942 AA223384 AA227092 AA227080 T12379 AA092174 T61139
			AA149776 AA699829 AW879188 AW813567 AW813538 AI267168 AA157718 AA157719 AA100472 AA100774 AA130756 AA157705 AA157730
			AA157715 AA053524 AW849581 AW854566 C05254 AW882836 T92637 AW812621 AA206583 AA209204 BE156909 AA226824 AJ829309 AW991957
			N66951 AA527374 H66215 AA045564 AJ694265 H60808 AA149726 AW195620 BE081333 BE073424 AW817662 AW817705 AW817703 AW817659
			BE081531 H59570
50	437549	438403_1	AA759149 AW751066 AW844938
	438223	452646_1	AA781171 AI202139 AI202098
	438993	467651_1	AA828995 AA834879 AI926361
	439848	477806_1	AW979249 D83277 AA846968
	443597	574739_1	AI078418 W80626 AW387769
	446995	702707_1	AI355012 AW812856
55	447197	711623_1	R36075 AI366546 R36167
	448437	763310_1	AW470125 AI734872 AI749559 AW856504 AJ583942 AW779036 AW843429 AW844876 AI520713 AW847236
	450190	827655_1	T51387 AW191595 T51271 AI686285
	451105	859083_1	AI761324 AW880941 AW880937
	451129	859870_1	BE072881 BE072946 AI762181
60	451237	863269_1	AW600293 AI767468
	455666	1349545_1	BE065813 BE065788 BE065889 BE065832
	455778	1364506_1	BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952
	456157	158261_1	AW979153 AA176967 AA826015

65	TABLE 40C:		
	Pkey:	Unique number corresponding to an Eos probeset	
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.	
	Strand:	Indicates DNA strand from which exons were predicted.	
	NT_position:	Indicates nucleotide positions of predicted exons.	

70	Pkey	Ref	Strand	NT_position
	400514	9796594	Minus	78844-79025,80850-80991,89754-89941,93750-93891
	401519	6649315	Plus	157315-157950
75	401708	2951946	Plus	154511-155298
	401866	8018106	Plus	73126-73623
	402075	8117407	Plus	121907-122035,122804-122921,124019-124161,124455-124610,125672-126076
	403055	8748904	Minus	109532-110225
	403208	7630829	Minus	147706-147903,148667-148804
80	403422	9665041	Minus	151169-151561
	403485	9966528	Plus	2888-3001,3198-3532,3655-4117
	403776	7770611	Minus	1414-1513,1624-1756
	404171	9930793	Plus	173667-173783,176876-177055
	404253	9367202	Minus	55675-56055

404519	8152000	Plus	12817-13000
404567	7249169	Minus	101320-101501
405484	5922025	Plus	199214-199579,199672-199920,200262-200495
405545	1054740	Plus	118677-118807,119091-119296,121626-121823
405818	4071056	Plus	29055-29196
406399	9256288	Minus	63448-63554

10 TABLE 41A: ABOUT 634 SEQUENCES UP-REGULATED IN STOMACH CANCER  
Table 41A lists about 634 genes up-regulated in stomach cancer compared to normal adult tissues that are likely to be extracellular or cell-surface proteins. These were selected as for Table 40A and the predicted protein contained a structural domain that is indicative of extracellular localization (e.g. Ig, fn3, egf, 7tm domains). Predicted protein domains are noted.

15	Pkey:	Unique Eos probeset identifier number			
	ExAcn:	Exemplar Accession number, Genbank accession number			
	UnigeneID:	Unigene number			
	Unigene Title:	Unigene gene title			
	PSDomain:	Protein Structural Domain			
	RI:	Ratio of tumor to normal adult tissues			
20	Pkey	ExAcn	UnigeneID	Unigene Title	PSDomain
	411243	AB039886	Hs.69319	CA11	SS
	418007	M13509	Hs.83169	matrix metallo	hemopexin,Peptidase_M10,SS
	448811	AJ590371	Hs.174759	ESTs	TM
25	409757	NM_001898	Hs.123114	cystatin SN	cystatin,SS
	421110	AJ250717	Hs.1355	cathepsin E	asp,SS
	428368	BE440042	Hs.83326	matrix metallo	hemopexin,Peptidase_M10,SS
	406687	M31126	Hs.272620	pregnancy spec	hemopexin,TM,
	428651	AF196478	Hs.188401	annexin A10	annexin,TM,
	425211	M18667	Hs.1867	progastrosin (	asp,TM,SS
30	423673	BE003054	Hs.1695	matrix metallo	hemopexin,Peptidase_M10,SS
	409683	U33317	Hs.711	defensin, alpha	defensins,Defensin_propep,SS
	428664	AK001666	Hs.189095	similar to SALL	zf-C2H2,TM,SS
	408380	AF123050	Hs.44532	diubiquitin	ubiquitin,7tm_3,ANF_receptor,sushi,7tm_1,TM,
	428953	AA306610	Hs.194676	DKFZP434C013 pr	arf,TNFR_c6,DEAD,Slathmin,TM,SS
35	450685	L15533	Hs.423	pancreatitis-as	lectin_c,TM,SS
	409187	AF154830	Hs.50966	carbamoyl-phosp	GATase,CPSase_L_chain,CPSase_sm_chain,MGS,TM,
	434206	AW136973	Hs.288516	ESTs, Weakly si	PH,TM,
	421346	Z34277	Hs.103707	epomucin	Cys_knot,vwd,
	427585	D31152	Hs.179729	collagen, type	C1q,Collagen,TM,SS
40	425679	X05997	Hs.159177	lipase, gastric	abhydrolase,SS
	421582	AJ910275	Hs.1406	trefoil factor	trefoil,trypsin,TM,SS
	422956	BE545072	Hs.122579	hypothetical pr	TM
	448105	AW581433	Hs.170675	ESTs, Weakly si	trypsin,TM,
	413385	M34455	Hs.840	indoleamine-pyr	IDO,TM,
45	417866	AW067903	Hs.82772	collagen, type	TSPN,Collagen,COLFI,SS
	419278	AU076799	Hs.1247	apolipoprotein	Apolipoprotein,SS
	407811	AW190902	Hs.40098	cysteine knot s	SS
	403422				SS
	403776				IL8,TM,SS
50	418478	U38945	Hs.1174	cyclin-dependen	ank,TM,SS
	428242	H55709	Hs.2250	leukemia inhibi	LIF_QSM,SS
	421341	AJ243212	Hs.279611	deleted in mali	SS
	428434	AW363590	Hs.65551	ESTs, Weakly si	SS
55	409420	Z15008	Hs.54451	laminin, gamma	laminin_EGF,laminin_B,SS
	413611	U58766	Hs.264428	tissue specific	Epimerase,TM,SS
	413719	BE439580	Hs.75498	small inducible	IL8,SS
	409956	AW103364	Hs.727	inhibin, beta A	TGF-beta,TGFb_propeptide,SS
	422420	U03398	Hs.1524	tumor necrosis	TNF,TM,
60	428227	AA321649	Hs.2248	small inducible	IL8,TM,SS
	422168	AA586894	Hs.112408	S100 calcium-bi	efhand,TM,
	412140	AA219691	Hs.73825	RAB6 interactin	kinesin,TM,SS
	414812	X72755	Hs.77367	monokine induce	IL8,SS
	419833	AA251131	Hs.220697	ESTs	WHEP-TRS,TM,
	446232	AJ281848	Hs.165547	ESTs	7tm_3,TM,
65	432398	AA307808	Hs.2979	trefoil factor	trefoil,TM,SS
	432867	AW016936	Hs.233384	ESTs	GSHPx,TM,SS
	424046	AF027856	Hs.138202	serine (or cyst	serpin,TM,
	414918	AJ219207	Hs.72222	Homo sapiens cD	TM
70	454293	H49739	Hs.134013	ESTs, Moderate	TM
	442577	AA292998	Hs.163900	ESTs	TM
	426174	AA547959	Hs.115838	ESTs	SS
	418869	AW516565	Hs.258279	ESTs	Sema,TM,
	418054	NM_002318	Hs.83354	lysyl oxidase-I	Lysyl_oxidase,SRCR,SS
75	442295	AJ827248	Hs.224398	Homo sapiens cD	Collagen,COLFI,vwc,TM,SS
	425921	NM_007231	Hs.162211	solute carrier	SNF,TM,
	421948	L42583	Hs.111758	keratin 5A	filament,TM,
	444783	AK001468	Hs.62180	antilin (Drosop	PH,TM,
	437527	AJ241019	Hs.145644	ESTs	PIP5K,TM,SS
80	433084	M18079	Hs.282265	fatty acid bind	lipocalin,SS
	452401	NM_007115	Hs.29352	tumor necrosis	Xlink,CUB,TM,SS
	456897	U85642	Hs.138506	ESTs	TM
	413808	J00287	Hs.182183	caldesmon 1	asp,TM,SS
	411274	NM_002776	Hs.69423	kapikrein 10	trypsin,TM,

418406	X73501	Hs.84905	cytokeratin 20	filament,TM,	3.32
419559	Y07828	Hs.91096	ring finger pro	zf-C3HC4,zf-B_box,TM,	3.32
423217	NM_000094	Hs.1640	collagen, type	fn3,Collagen,Kunitz_BPTI,vwa,SS	3.31
411558	AA102670	Hs.70725	gamma-aminobuty	neur_chan,TM,SS	3.30
427722	AK000123	Hs.180479	hypothetical pr	PH,SS	3.30
422310	AA316622	Hs.98370	cytochrome P540	p450,SS	3.30
411263	BE297802	Hs.69380	kinesin-like 6	kinesin,TM,	3.29
443426	AF098158	Hs.9329	chromosome 20 o	TM	3.28
452121	NM_004081	Hs.70936	deleted in azoo	TM	3.27
447342	AI199268	Hs.19322	ESTs	TM,SS	3.25
452699	AW295390	Hs.213062	ESTs	TM	3.23
425188	AK002052	Hs.155071	hypothetical pr	TM	3.23
400289	X07620	Hs.2258	matrix metallo	hemopexin,SS	3.21
408524	D87942	Hs.46328	fucosyltransfer	Glyco_transf_11,TM,SS	3.20
437897	AA770581	Hs.146170	hypothetical pr	TM	3.20
453922	AF053306	Hs.36708	budding uninhib	TM	3.19
406690	M29540	Hs.220529	carcinoembryoni	lg,TM,SS	3.19
416209	AA236776	Hs.79078	MAD2 (mitotic a	HORMA,SS	3.16
408113	T82427	Hs.194101	Homo sapiens cD	7tm_3,TM,	3.14
425465	L18964	Hs.1904	protein kinase	Shi_Sno,DAG_PE-bind,OPR,ptase,ptase_C,TM,SS	3.13
419216	AU076718	Hs.164021	small inducible	IL8,TM,SS	3.13
418203	X54942	Hs.83758	CDC28 protein k	CKS,TM,	3.12
417315	AI080042	Hs.180450	ribosomal prote	TM,SS	3.11
433001	AF217513	Hs.279905	clone HQ0310 PR	TM,SS	3.11
459587	AA031956		gb:zk15e04.s1 S	LJM,TM,	3.11
421379	Y15221	Hs.103982	small inducible	IL8,TM,SS	3.10
414774	X02419	Hs.77274	plasminogen act	kringle,trypsin,SS	3.10
407289	AA135159	Hs.203349	Homo sapiens cD	TM	3.09
447519	U46258	Hs.23448	ESTs	histone,Ribosomal_L22e,TM,	3.08
448045	AJ297436	Hs.20166	prostate stem c	TM,SS	3.07
431956	AK002032	Hs.272245	Homo sapiens cD	RA,SS	3.06
409632	W74001	Hs.55279	serine (or cyst	serpin,TM,	3.05
454034	NM_000691	Hs.575	aldehyde dehydr	aldodh,TM,	3.05
436481	AA379597	Hs.5199	HSPC150 protein	UQ_con,TM,	3.05
428987	NM_004751	Hs.194710	glucosaminyl (N	Branch,TM,SS	3.04
424252	AK000520	Hs.143811	hypothetical pr	casein_kappa,SS	3.04
436291	BE568452	Hs.5101	protein regulat	TM	3.03
411789	AF245505	Hs.72157	Homo sapiens ad	lg.LRRCT,SS	3.02
417956	AA210704	Hs.190465	ESTs	sushi,SS	3.02
408908	BE296227	Hs.48915	serine/threonin	pkase,TM,SS	3.01
422330	D30783	Hs.115263	epiregulin	EGF,TM,SS	3.01
425071	NM_013989	Hs.154424	deiodinase, iod	T4_deiodase,TM,SS	3.00
425761	AW564214	Hs.196729	ESTs	SH3,TM,	2.99
432978	AF126743	Hs.279684	DNAA domain-con	DJ,TM,	2.99
418546	AA224827		gb:nc32g04.s1 N	vwa,Integrin_A,FG-GAP,TM,SS	2.99
425371	D49441	Hs.155981	mesothelin	TM,SS	2.99
422440	NM_004812	Hs.116724	aldo-keto reduc	aldo_ket_red,TM,	2.98
439453	BE264974	Hs.6566	thyroid hormone	AAA,TM,	2.98
413278	BE563085	Hs.833	interferon-stim	ubiquitin,TM,	2.97
428450	NM_014791	Hs.184339	KIAA0175 gene p	pkase,KAI,TM,	2.95
424345	AK001380	Hs.145479	Homo sapiens cD	TM,SS	2.95
433133	AB027249	Hs.104741	PDZ-binding kin	pkase,TM,	2.94
432269	NM_002447	Hs.2942	macrophage stim	pkase,Sema,Plaxin_repeat,TIG,TM,SS	2.94
432917	NM_014125	Hs.279812	PRO0327 protein	TM	2.94
432731	R31178	Hs.287820	fibronectin 1	SS	2.93
420552	AK000492	Hs.98806	hypothetical pr	SS	2.92
428303	AW974476	Hs.183601	regulator of G-	RGS,TM,	2.92
409687	T51125	Hs.8493	ESTs	Ets,SAM_PNT,TM,	2.91
457288	AA521458	Hs.192738	ESTs	TM	2.89
456181	L36463	Hs.1030	ras inhibitor	RA,VPS9,TM,SS	2.89
450190	T51387		gb:yb20e08.r1 S	SH3,TM,	2.88
430204	AA618335	Hs.146137	ESTs, Weakly si	TM	2.88
434808	AF155108	Hs.256150	ESTs, Highly si	TM	2.87
450983	AA305384	Hs.25740	ERO1 (S. cerevi	SS	2.87
418670	AA601036	Hs.285083	ESTs	TM	2.87
416661	AA634543	Hs.79440	IGF-II mRNA-bin	KH-domain,TM,	2.87
435099	AC004770	Hs.4756	flap structure-	XPG_J,XPG_N,TM,	2.86
402075				serpin,TM,	2.84
410681	AW246890	Hs.65425	calbindin 1, (2	ethand,FHA,BRCT,adh_short,adh_short_C2,TM,	2.83
439867	AA847510	Hs.161292	ESTs	TM	2.83
443715	AI583187	Hs.9700	cyclin E1	cyclin,TM,SS	2.83
417366	BE185289	Hs.1076	small protine-r	Comitin,TM,	2.83
422283	AW411307	Hs.114311	CDC45 (cell div	CDC45,TM,SS	2.82
404567				HECT,zf-UBR1,TM,	2.82
422158	L10343	Hs.112341	protease inhibi	wap,SS	2.82
449224	AW995911	Hs.299883	hypothetical pr	fn3,TM,	2.81
407584	W25945	Hs.18745	ESTs	PK,SS	2.81
453884	AA355925	Hs.36232	KIAA0186 gene p	TM	2.81
449032	AA045573	Hs.22900	nuclear factor	bZIP,Chromo_shadow,TM,SS	2.80
422809	AK001379	Hs.121028	hypothetical pr	IQ,TM,	2.79
449722	BE280074	Hs.23960	cyclin B1	cyclin,TM,	2.79
453028	AB006532	Hs.31442	RecQ protein-II	DEAD,helicase_C,TM,	2.78
421777	BE562088	Hs.108196	HSPC037 protein	TM	2.78

	452571	W31518	Hs.34665	ESTs	TM	2.77
	422675	BE018517	Hs.119140	eukaryotic tran	elf-5a, TM,	2.77
	400298	AA032279	Hs.61635	six transmembra	TM	2.76
	414569	AF109298	Hs.118258	prostate cancer	TM	2.76
5	449378	AW664026	Hs.59892	ESTs	TM	2.75
	423903	M57765	Hs.1721	interleukin 11	TM,SS	2.75
	431104	AW970859	Hs.269109	ESTs	Sema, TM, SS	2.75
	452940	AA029722	Hs.20279	ESTs	7m_1, TM, SS	2.74
10	432201	AI538613	Hs.135657	ESTs	trypsin, TM,	2.73
	414617	AI339520	Hs.20524	ESTs, Moderate	hexokinase, TM,	2.73
	444301	AK000136	Hs.10760	hypothetical pr	LRR, TM,	2.72
	426711	AA383471	Hs.180669	conserved gene	TM	2.71
	429432	AI678059	Hs.202676	synaptonemal co	TM	2.71
15	450506	NM_004460	Hs.418	fibroblast acti	Peptidase_S9, DPPIV, N-term, SS	2.71
	427528	AU077143	Hs.179565	minichromosome	MCM, TM, SS	2.71
	418801	AA228366	Hs.115122	ESTs	integrin_A, FG-GAP, TM, SS	2.71
	429486	AF155827	Hs.203963	hypothetical pr	SNF2_N, helicase_C, TM,	2.71
	408366	AW511255	Hs.258082	ESTs	SS	2.70
20	406399				kazal, TM, SS	2.69
	446269	AW263155	Hs.14569	hypothetical pr	TM	2.68
	426514	BE616633	Hs.301122	bone morphogene	TGF-beta, TGFb_propeptide, TM, SS	2.67
	417079	U65590	Hs.81134	interleukin 1 r	IL1, SS	2.67
	444754	T83911	Hs.11881	transmembrane 4	TM, SS	2.67
25	424687	J05070	Hs.151738	matrix metallo	h2, hemopexin, Peptidase_M10, SS	2.66
	439979	AW600291	Hs.6823	hypothetical pr	TM	2.65
	430832	AI073913	Hs.100686	ESTs, Weakly si	TM, SS	2.65
	429170	NM_001394	Hs.2359	dual specific	DSPc, Rhodanese, TM,	2.64
	450400	AI694722	Hs.279744	ESTs	TM	2.64
30	435380	AA679001	Hs.192221	ESTs	Occludin, TM, SS	2.64
	432375	BE536069	Hs.2962	S100 calcium-bi	S_100, ehhand, TM, SS	2.63
	453700	AB009426	Hs.560	apolipoprotein	dCMP_cyt_deam_sugar_tr, TM, SS	2.63
	422938	NM_001809	Hs.1594	centromere prot	histone, TM,	2.63
	453134	AA032211	Hs.118493	ESTs	adh_short, TM, SS	2.63
35	420727	H75701	Hs.99886	complement comp	sushi,	2.62
	408868	AW292286	Hs.255058	ESTs	TM	2.62
	414972	BE263782	Hs.77695	KIAA0008 gene p	TM	2.62
	403055				filament, TM, SS	2.62
40	447400	AK000322	Hs.18457	hypothetical pr	zf-C3HC4, TM,	2.61
	413753	U17760	Hs.301103	Human DNA seque	laminin_EGF, laminin_Nterm, SS	2.61
	432220	AI076192	Hs.131933	ESTs	TM	2.60
	436251	BE515065	Hs.5092	nucleolar prote	Nop, TM, SS	2.60
	448988	Y09763	Hs.22785	gamma-aminobuty	neur_chan, TM, SS	2.60
	425463	AK000740	Hs.157986	hypothetical pr	TM	2.60
45	435370	AI964074	Hs.225838	ESTs	EGF, fn3, fibrinogen_C, TM, SS	2.59
	432215	AU076609	Hs.2934	ribonucleotide	ribonucleo_red, ribonuc_red_lp, TM,	2.59
	409142	AL136877	Hs.50758	chromosome-asso	SMC_N, TM, SS	2.59
	443919	AI091284	Hs.135224	ESTs	adh_short, TM, SS	2.58
	413268	AL039079	Hs.75256	regulator of G-	RGS, TM,	2.58
50	404519				defensins, SS	2.58
	414998	NM_002543	Hs.77729	oxidised low de	TM	2.57
	429597	NM_003816	Hs.2442	a disintegrin a	TM, SS	2.57
	426841	AI052358	Hs.193726	ESTs	asp, TM, SS	2.57
55	416768	AA363733	Hs.1032	regenerating is	lectin_c, SS	2.57
	417933	X02308	Hs.82962	thymidylate syn	thymidylat_syn, SS	2.56
	441384	AA447849	Hs.288660	protease, serin	TM	2.56
	451939	U80456	Hs.27311	single-minded (	PAC, PAS, BPL, BPL_C, TM,	2.56
	418867	D31771	Hs.89404	msh (Drosophila	homeobox, TM,	2.55
	416065	BE267931	Hs.78996	proliferating c	TM	2.55
60	431890	X17033	Hs.271986	integrin, alpha	vwa, integrin_A, FG-GAP, TM, SS	2.55
	407830	NM_001086	Hs.587	arylacetamide d	COesterase, 7m_1, TM, SS	2.55
	434815	AF155582	Hs.46744	core1 UDP-galac	SS	2.54
	435647	AI653240	Hs.49823	ESTs	TM	2.54
	459306	AW578452	Hs.232988	ESTs, Weakly si	TM, SS	2.54
65	414361	AI086138	Hs.204044	ESTs	TM	2.54
	425782	U66468	Hs.159525	cell growth reg	SS	2.53
	416984	H38765	Hs.80708	diaphorase (NAD	TM	2.53
	431183	NM_006855	Hs.250696	KDEL (Lys-Asp-G	ER_lumen_recept, IIRK, DEAD, helicase_C, TM, SS	2.53
	456743	AI630124	Hs.7434	ESTs	TM	2.53
70	410268	AA316181	Hs.61635	six transmembra	TM	2.52
	424905	NM_002497	Hs.153704	NIMA (never in	pkise, TM,	2.52
	432657	AA831815	Hs.270940	ESTs	TM	2.51
	434080	AI820719	Hs.154662	hypothetical pr	DJ_CXXCXGXG, TM, SS	2.51
	418969	W33191	Hs.28907	hypothetical pr	SH3, TM,	2.51
75	431808	M30703	Hs.270833	amphiregulin (s	EGF, TM, SS	2.51
	429093	NM_000253	Hs.195799	microsomal trig	Vitellogenin_N, TM, SS	2.50
	447634	AW967902	Hs.5152	Homo sapiens cD	TM	2.50
	436393	AW022213	Hs.143617	ESTs	Galactosyl_T_2, TM, SS	2.50
	453751	R36762	Hs.101282	Homo sapiens mR	TM	2.49
80	445865	AI282584	Hs.145575	ESTs	SS	2.49
	414883	AA926960	Hs.77550	CDC28 protein k	CKS, TM,	2.49
	406747	AI925153	Hs.217493	annexin A2	TM	2.49
	446921	AB012113	Hs.16530	small inducible	IL8, SS	2.49
	426322	J05068	Hs.2012	transcobalamin	Cobalamin_bind, TM, SS	2.48

5	422515	AW500470	Hs.117950	multifunctional	AIRC,SAICAR_synth,TM,	2.48
	447030	AW444559	Hs.232184	ESTs	TM	2.48
	448454	NM_005879	Hs.21254	TRAF interacti	zf-C3HC4,TM,	2.48
	419092	J05581	Hs.89603	mucln 1, transm	SEA,TM,SS	2.48
	409640	U78722	Hs.55481	zinc finger pro	zf-C2H2,SCAN,TM,	2.48
	404171				sodfa,TM,	2.47
	414747	U30872	Hs.77204	centromere prot	SS	2.47
	410406	A1969703	Hs.301842	ESTs	FGGY,TM,	2.47
10	452220	BE158006	Hs.212296	ESTs	FG-GAP,TM,SS	2.46
	421493	BE300341	Hs.104925	ectodermal-neur	BTB,Kelch,TM,	2.46
	444838	AV651680	Hs.208558	ESTs	Integrin_A,FG-GAP,TM,SS	2.46
	413816	AW958181	Hs.189958	ESTs	AMP-binding,G_glu_transsept,TM,	2.46
	436613	AA972691	Hs.192974	Homo sapiens cD	TM,SS	2.45
15	432874	W94322	Hs.279651	metanoma inhibi	SH3,SS	2.45
	425397	J04088	Hs.156346	topoisomerase (	HATPase_c,SS	2.45
	422363	T55979	Hs.115474	replication fac	TM	2.45
	431924	AK000850	Hs.272203	Homo sapiens cD	SH3,TM,	2.44
	431457	NM_012211	Hs.256297	integrin, alpha	FG-GAP,vwa,TM,SS	2.44
	416498	U33632	Hs.79351	potassium chann	TM	2.44
20	428484	AF104032	Hs.184601	solute carrier	aa_permeases,TM,	2.43
	431958	X63829	Hs.2877	cadherin 3, typ	cadherin,Cadherin_C_term,TM,SS	2.43
	413833	Z15005	Hs.75573	centromere prot	kinesin,TM,	2.43
	407243	AA058357	Hs.74466	carcinoembryoni	TM,SS	2.43
25	410044	BE566742	Hs.58169	highly expresse	TM,SS	2.43
	424273	W40460	Hs.144442	phospholipase A	phospho,TM,SS	2.42
	409533	AW969543	Hs.21291	mitogen-activat	TM,SS	2.42
	419741	NM_007019	Hs.93002	ubiquitin carri	UQ_con,ethand,TM,SS	2.42
	449987	AW079749	Hs.184719	ESTs, Weakly si	ABC_tran,ABC_membrane,TM,	2.42
30	433159	AB035898	Hs.150587	kinesin-like pr	kinesin,Myosin_tail,TM,SS	2.42
	439396	BE582958	Hs.74348	ESTs, Weakly si	SS	2.42
	426427	M86699	Hs.169840	TTK protein kin	pkase,TM,	2.41
	434725	AK000796	Hs.4104	hypothetical pr	TM	2.41
	433312	AJ241331	Hs.131765	ESTs	zf-C2H2,SS	2.41
35	407047	X65965		gbt:H.sapiens SO	sodfa,TM,	2.41
	419220	AA811938	Hs.291759	ESTs	TM,SS	2.40
	416530	U62801	Hs.79361	kalikrein 6 (n	trypsin_pro_isomerase,TM,SS	2.40
	435219	AA676349	Hs.190331	ESTs	TM	2.40
	418322	AA284166	Hs.84113	cyclin-dependen	SS	2.40
40	404253				histone,TM,SS	2.40
	428970	BE276891	Hs.194691	retinoic acid i	7sm_3,TM,	2.40
	418693	A1750878	Hs.87409	thrombospondin	EGF,TSPN,isp_1,isp_3,vwc,SS	2.39
	451237	AW600293		gb:EST00049 pGE	TM	2.39
	407756	AA115021	Hs.38260	ubiquitin speci	UCH-1,UCH-2,SS	2.39
45	437935	AW939591	Hs.5940	hypothetical pr	TM,SS	2.39
	445625	BE246743	Hs.288529	Homo sapiens cD	TM	2.39
	435937	AA830893	Hs.119769	ESTs	TM	2.39
	438993	AA828995		gb:od77b08.s1 N	Integrin_8,TM,SS	2.38
	422082	AA016188	Hs.111244	hypothetical pr	TM	2.38
50	450396	AU077002	Hs.24950	regulator of G-	RGS,TM,	2.38
	422578	AF239666	Hs.1545	caudal type hom	homeobox,SS	2.38
	428070	T63918	Hs.182313	retinol-binding	lipocalin,TM,	2.38
	416111	AA033813	Hs.79018	chromatin assem	TM,SS	2.37
	433345	AJ681545	Hs.152982	Homo sapiens cD	TM	2.37
55	427557	NM_002659	Hs.179657	plasminogen act	UPAR_LY6,SS	2.37
	423554	M90516	Hs.1674	glutamine-fruct	GATase_2,SIS,TM,SS	2.37
	453204	R10799	Hs.191990	ESTs	TM	2.37
	425081	X74794	Hs.154443	minichromosome	MCM,TM,	2.36
	434682	AA827165	Hs.191958	ESTs	TM	2.36
60	414108	AJ267592	Hs.75761	SFRS protein ki	pkase,TM,	2.36
	417900	BE250127	Hs.82906	CDC20 (cell div	WD40,TM,	2.36
	428046	AW812795	Hs.155381	ESTs, Moderatel	ank,SS	2.36
	448019	AW947164	Hs.195641	ESTs	TM	2.36
	431753	X76029	Hs.2841	neuromedin U	NMU,TM,SS	2.36
65	410361	BE391804	Hs.62661	guanylate bindi	GBP,TM,SS	2.36
	418526	BE019020	Hs.85838	solute carrier	MCT,TM,SS	2.36
	444478	W07318	Hs.240	M-phase phospho	kinesin,SS	2.36
	436961	AW375974	Hs.156704	ESTs	TM	2.35
	408194	AA601038	Hs.191797	ESTs	TM	2.35
70	438578	AA811244	Hs.164168	ESTs	formyl_transf,AIRS,GARS,TM,	2.35
	429183	AB014604	Hs.197955	KIAA0704 protei	TM	2.35
	453900	AW003582	Hs.226414	ESTs, Weakly si	TM	2.33
	432877	AW974111	Hs.292477	ESTs	Est,SAM_PNT,TM,	2.33
	451928	AJ823801	Hs.30315	ESTs	TM	2.33
75	418245	AA088767	Hs.83883	transmembrane,	kl_recept_a,TM,SS	2.33
	435106	AA100847	Hs.193380	ESTs, Highly si	TM	2.33
	432193	AA372264	Hs.273193	hypothetical pr	TM,SS	2.33
	449532	W74653	Hs.271593	ESTs	TM	2.33
	409703	NM_006187	Hs.56009	Z-Soligoadeny	NTP_transf_2,TM,SS	2.33
80	419373	NM_003244	Hs.90077	TG-interacting	homeobox,SS	2.32
	435607	W73428	Hs.8750	uncharacterized	SS	2.32
	405818				TM,SS	2.32
	444371	BE540274	Hs.239	forkhead box M1	Fork_head,SS	2.32
	432675	AJ791855	Hs.105884	ESTs	PDEase,TM,	2.32

5	411773	NM_006799	Hs.72026	protease, serin	trypsin,SS	2.31
	434775	AA648983	Hs.212911	ESTs	TM,SS	2.31
	422611	AA158177	Hs.118722	tucoosyltransfer	SS	2.31
	419493	AF001212	Hs.90744	proteasome (pro	SS	2.31
	424435	AB011167	Hs.146957	KIAA0595 protei	TM	2.30
	409262	AK000631	Hs.52256	hypothetical pr	WD40,TM,SS	2.30
	428125	AA393071	Hs.182579	leucine aminope	Peptidase_M17,TM,SS	2.30
	417655	AA780791	Hs.14014	ESTs, Weakly si	TM	2.29
10	407287	AI578812	Hs.201658	ESTs, Weakly si	ras,TM,SS	2.29
	428923	BE047698	Hs.188785	ESTs	TM,SS	2.29
	452203	X57522	Hs.158164	ATP-binding cas	ABC_tran,ABC_membrane,TM	2.29
	409402	AF208234	Hs.695	cystatin B (sta	cystatin,SS	2.29
	419359	AI043202	Hs.90073	chromosome segr	TM,SS	2.29
15	451999	AW176401	Hs.27424	DEAD/H (Asp-Glu	TM,SS	2.29
	400811	AF219139	Hs.87726	KIAA0154 protei	Cobalamin_bind,SS	2.29
	420931	AF044197	Hs.100431	small inducible	IL8,TM,SS	2.28
	425247	NM_005940	Hs.155324	matrix metallo	hemopexin,Peptidase_M10,TM,SS	2.28
	438170	AI916685	Hs.194601	ESTs	2-Hydroxy,OH,TM,	2.28
20	445378	AV853564	Hs.226946	ESTs	TM	2.28
	428048	AA705745	Hs.185070	ESTs	AMP-binding,TM,	2.28
	414696	AF002020	Hs.76918	Niemann-Pick di	Patched,TM,SS	2.27
	433535	AF111106	Hs.3382	protein phospho	TM	2.27
	421155	H87879	Hs.102267	lysyl oxidase	Lysyl_oxidase,SS	2.27
25	405545				ABC_tran,ABC_membrane,TM,SS	2.27
	445537	AJ245671	Hs.12844	EGF-like-domain	EGF,SS	2.27
	423634	AW959908	Hs.1690	heparin-binding	TM,SS	2.26
	407742	AF186252	Hs.38084	sulfotransferase	Sulfotransfer,SS	2.26
	428330	L22524	Hs.2256	matrix metallo	Peptidase_M10,SS	2.26
30	429731	AK001692	Hs.212172	beta,beta-carot	TM	2.26
	400514				p450,TM,SS	2.26
	431846	BE019924	Hs.271580	uroplakin 1B	transmembrane4,TM,SS	2.26
	426010	AA136563	Hs.1975	Homo sapiens cD	TM	2.26
	437641	AA811452	Hs.291911	ESTs	TM	2.26
35	411393	AW797437	Hs.69771	B-factor, prope	sushi,trypsin,vwa,DEAD,rm,EGF,fn3,fibrinogen_C,SS	2.26
	414809	AI434599	Hs.77356	transferrin rec	PA,Ribosomal_S2,TM,	2.25
	419488	AA316241	Hs.90691	nucleophosmin/v	SS	2.25
	434540	NM_015045	Hs.5184	TH1 drosophila	TM	2.25
	410196	AI936442	Hs.59838	hypothetical pr	UBACT_repeat,TM,	2.25
40	456844	AI264155	Hs.152981	CDP-diacylglyce	Cytidylyltrans,TM,	2.25
	408353	BE439838	Hs.44298	hypothetical pr	Ribosomal_S17,TM,	2.25
	448753	AL048858	Hs.224355	ESTs, Weakly si	TM	2.25
	428479	Y00272	Hs.184572	cell division c	pkase,TM,SS	2.24
	424971	AA479005	Hs.154036	tumor suppressi	ion_trans,PH,TM,	2.24
45	432673	AB028859	Hs.278605	ER-associated D	DJ,DJ_C,TM,SS	2.24
	409432	D49372	Hs.54460	small inducible	IL8,TM,SS	2.24
	429925	NM_000786	Hs.226213	cytochrome P450	p450,TM,SS	2.24
	445413	AA151342	Hs.12677	CGI-147 protein	UPF0099,TM,SS	2.23
	447532	AK000614	Hs.18791	hypothetical pr	TM	2.23
50	423515	AA327017	Hs.162204	ESTs	SS	2.23
	444743	AA045648	Hs.11817	nudix (nucleosi	mutT,TM,	2.23
	434518	H56995	Hs.37372	Homo sapiens DN	TM	2.23
	435602	AF217515	Hs.283532	uncharacterized	TM,SS	2.23
55	449974	AW970948	Hs.269403	ESTs	TM,SS	2.23
	424927	AW973668	Hs.153850	hypothetical pr	TM	2.23
	414420	AA043424	Hs.76095	immediate early	TM	2.23
	431840	AA534908	Hs.2860	POU domain, cla	homeobox_pou,TM,SS	2.23
	452930	AW195285	Hs.194097	ESTs	SS	2.23
	436391	AJ227892	Hs.146274	ESTs	SS	2.23
60	439186	AK697274	Hs.6487	Xq28, 2000bp se	Epimerase,SS	2.23
	414732	AW410976	Hs.77152	minichromosome	MCM,TM,	2.22
	411835	U29343	Hs.72550	hyaluronan-medi	TM	2.22
	438223	AA781171		gb:a24405.s1 S	myosin_head,TM,	2.22
	450149	AW969781	Hs.293440	ESTs, Moderatel	TM	2.22
65	401519				filament,TM,	2.22
	441794	AW197794	Hs.253338	ESTs	ank,TM,	2.22
	408901	AK001330	Hs.48855	hypothetical pr	TM	2.21
	434423	NM_006769	Hs.3844	LIM domain only	LIM,TM,	2.21
	432140	AK000404	Hs.272688	hypothetical pr	SS	2.21
70	423453	AW450737	Hs.128791	CGI-09 protein	Grain,CDP-OH_P_transf,TM,	2.21
	428438	NM_001955	Hs.2271	endothelin 1	endothelin,TM,SS	2.21
	421470	R27496	Hs.1378	annexin A3	annexin,TM,SS	2.21
	440381	AA917808	Hs.190495	ESTs	TM,SS	2.20
	453779	N35187	Hs.43388	ESTs	TM,SS	2.20
75	433627	AF078866	Hs.284296	Homo sapiens cD	SURF4,TM,	2.20
	417944	AU077196	Hs.82985	collagen, type	COL1,Collagen,vwc,TM,SS	2.20
	422689	AW856665		gb:RC3-CT0297-2	SNF2_N,TM,	2.20
	448457	H65629	Hs.245997	ESTs	TM,SS	2.20
	426125	X87241	Hs.166894	FAT tumor suppr	EGF_cadherin,laminin_G,TM,SS	2.20
80	430603	AA148164	Hs.247280	HBV associated	zf-C3HC4,TM,	2.20
	425274	BE281191	Hs.155462	minichromosome	MCM,TM,	2.20
	452679	242387	Hs.4299	Homo sapiens cD	TM	2.20
	410619	BE512730	Hs.65114	keratin 18	filament,TM,	2.20
	424332	AA338919	Hs.101615	ESTs	SS	2.20

	418661	NM_001949	Hs.1189	Human mRNA for	E2F, TDP, TM, SS	2.20
	419341	N71463	Hs.118888	ESTs, Weakly si	UPF0016, TM, SS	2.20
	427920	Z11502	Hs.181107	annexin A13	annexin, TM,	2.19
5	403208				lectin_c, TM, SS	2.19
	422596	AF063611	Hs.118633	2'-5' oligoadeny	ubiquitin, SS	2.19
	444261	AA298958	Hs.10724	MDS023 protein	TM	2.19
	423401	NM_001992	Hs.128087	coagulation fac	7tm_1, TM, SS	2.18
	453450	AW797627	Hs.89474	ADP-ribosylatio	SS	2.18
10	444334	BE296785	Hs.10848	KIAA0187 gene p	SS	2.18
	437616	AI797163	Hs.207954	ESTs	SMC_N, TM, SS	2.18
	451807	W52854	Hs.27099	DKFZP564J0863 p	TM	2.18
	430441	BE398091	Hs.6860	DKFZP434D156 pr	TM	2.18
	411678	AJ907114	Hs.71465	squalene epoxid	Monooxygenase, TM,	2.18
15	452291	AF015592	Hs.28853	CDC7 (cell divi	pkise, TM,	2.18
	444342	NM_014398	Hs.10887	similar to lyso	Lamp, TM, SS	2.18
	451099	R52785	Hs.25954	Interleukin 13	tn3, TM, SS	2.18
	425873	NM_013390	Hs.160417	transmembrane p	TM	2.17
	417404	NM_007350	Hs.82101	pleckstrin homo	TM	2.17
20	446995	AI355012		gbzqu16d10.x1 N	TM	2.17
	439961	AA857451	Hs.269696	ESTs	TM	2.17
	429125	AA446854	Hs.271004	ESTs	TM	2.17
	407103	AA424881	Hs.256301	ESTs	TM	2.17
	415116	AA160383	Hs.269956	ESTs	ER_lumen_recept, TM, SS	2.17
25	440052	AI633744	Hs.195648	ESTs	PAC, TM, SS	2.17
	423961	D13666	Hs.136348	osteoblast spec	Fascidin, TM, SS	2.17
	431070	AW408164	Hs.249184	transcription f	FHA, SS	2.16
	443599	AI079559	Hs.134125	ESTs	TM	2.16
	427258	AA400091	Hs.39421	ESTs	TM	2.16
30	418113	AJ272141	Hs.83484	SRY (sex determ	HMG_box, TM,	2.16
	450835	BE262773	Hs.25584	hypothetical pr	ArfGap, SS	2.16
	449057	AB037784	Hs.22941	KIAA1363 protei	TM	2.16
	448153	Y10805	Hs.20521	HMT1 (hnRNP met	TM, SS	2.16
	424653	AW977534	Hs.151469	calcium/calmodu	Guanylate_kin, PDZ, pkise, SH3, TM,	2.16
35	431341	AA307211	Hs.251531	proteasome (pro	proteasome, TM,	2.16
	452865	AJ924046	Hs.119567	ESTs	PMP22_Claudin, TM, SS	2.16
	432789	D26361	Hs.3104	KIAA0042 gene p	TM	2.16
	438580	AA811262	Hs.299202	ESTs	pkise, TM,	2.16
	422192	AA305159	Hs.113019	fts485	SS	2.15
40	425607	U09860	Hs.158333	protease, serin	ldl_recept_a, trypsin, CUB, SRCR, MAM, SEA, TM, SS	2.15
	447289	AW247017	Hs.38978	melanoma antige	3Beta_HSD, Epimerase, MAGE, TM,	2.15
	447674	BE270640	Hs.19192	cyclin-dependen	pkise, TM,	2.15
	441021	AW578716	Hs.7644	H1 histone fami	linker_histone, TM,	2.15
	426471	M22440	Hs.170009	transforming gr	EGF, TM, SS	2.15
45	431941	AK000106	Hs.272227	Homo sapiens cD	pkise, Furin-like, TM, SS	2.15
	414761	AU077228	Hs.77256	enhancer of zes	SET, TM,	2.15
	410407	X66839	Hs.63287	carbonic anhydr	carb_anhydrase, TM, SS	2.15
	420900	AL045633	Hs.44269	ESTs	Ald_Xan_dh_C_FAD_binding_5, TM,	2.15
	419239	AA468183	Hs.184598	Homo sapiens cD	TM	2.15
50	452721	AJ269529	Hs.30377	Homo sapiens ES	TM	2.15
	410664	NM_006033	Hs.65370	lipase, endothe	Ribosomal_L22, lipase, PLAT, TM, SS	2.14
	452835	AK001269	Hs.30738	hypothetical pr	TM	2.14
	452092	BE245374	Hs.27842	hypothetical pr	Acyltransferase, TM, SS	2.14
	401708				SS	2.14
55	411400	AA311919	Hs.69851	GAR1 protein	TM	2.14
	448526	AB028946	Hs.21361	KIAA1023 protei	TM	2.14
	421175	AI879099	Hs.102397	GIOT-3 for gona	zf-C2H2, KRAB, TM, SS	2.14
	413511	AI627178	Hs.75412	Arginine-rich p	TM	2.13
	432945	AL043683	Hs.271357	ESTs, Weakly si	PK, SS	2.13
60	418592	X99226	Hs.284153	Fanconi anemia,	TM	2.13
	425298	AK000209	Hs.155656	hypothetical pr	TM	2.13
	450956	AW193531	Hs.205647	ESTs, Moderate	pkise, TM, SS	2.13
	419569	AI971651	Hs.91143	jagged 1 (Alag)	EGF_DSL, TM, SS	2.13
	421508	NM_004833	Hs.105115	absent in melan	TM	2.13
65	413670	AB000115	Hs.75470	hypothetical pr	TM	2.13
	422783	AA588956	Hs.120439	ethanolamine ki	Choline_kise, TM,	2.13
	410418	D31382	Hs.63325	transmembrane p	trypsin, ldl_recept_a, TM, SS	2.13
	414860	BE255593	Hs.77502	methionine aden	S-AdoMet_synt, SS	2.13
	425860	L29339	Hs.1964	solute carrier	SSF_Ribosomal_S17a, TM,	2.13
70	414839	X63692	Hs.77462	DNA (cytosine-5	zf-CXXC, BAH, TM, SS	2.13
	437050	AA766420	Hs.291606	ESTs	TM	2.13
	430217	H47863	Hs.180450	ribosomal prote	TM, SS	2.13
	409012	AL117435	Hs.49725	DKFZP434I216 pr	RhoGEF, TM,	2.12
	428365	AA295331	Hs.183861	Homo sapiens cD	TM	2.12
	410839	NM_006849	Hs.66581	protein disulf	thiorel, TM,	2.12
75	450510	AA010056	Hs.242998	ESTs	TM, SS	2.12
	427475	AA403151	Hs.191605	ESTs	SS	2.12
	433748	R12244		gbry03c12.r1 S	AMP-binding, TM,	2.12
	415138	C18356	Hs.78045	tissue factor p	Kunitz_BPTI, G-gamma, TM, SS	2.11
80	414788	X78342	Hs.77313	cyclin-dependen	pkise, TM, SS	2.11
	415474	NM_014252	Hs.78457	solute carrier	mito_carr, TM,	2.11
	416472	AA180756	Hs.193094	ESTs, Moderate	TM	2.11
	410718	AF920783	Hs.191435	ESTs	SOS_PSY, TM, SS	2.11
	425811	AL039104	Hs.159557	karyopherin alp	Armado_seg, IBB, TM, SS	2.11



	447197	R36075		gb:yh88b01.s1 S	SDF,TM,	2.11
	431621	AW292329	Hs.163481	ESTs	PM,Band_41,TM,SS	2.11
	433849	BE465884	Hs.280728	ESTs	SS	2.11
5	438038	AI732629	Hs.194161	ESTs, Weakly si	Cydytyltrans,TM,	2.11
	422032	AA476966	Hs.110857	polymerase (RNA	TFIIS,TM,SS	2.11
	409717	AW452871	Hs.56043	CGI-115 protein	TM	2.11
	445837	AI261700	Hs.145544	ESTs	TM	2.11
	423880	BE278111	Hs.134200	DKFZP564C186 pr	TM	2.10
10	421574	AJ000152	Hs.105924	defensin, beta	Defensin_beta,TM,SS	2.10
	437103	AW139408	Hs.152940	ESTs	Choline_kise,TM,	2.10
	450747	AI064821	Hs.48306	ESTs, Highly si	nm,TM,	2.10
	437033	AW248364	Hs.5409	RNA polymerase	TM	2.10
	417640	D30857	Hs.82353	protein C recep	TM,SS	2.10
	431120	AA492588		gb:ng99c08.s1 N	TM,SS	2.10
15	430510	AW162916	Hs.241576	hypothetical pr	TM	2.10
	429669	BE185499	Hs.2471	KIAA0020 gene p	TM	2.10
	407881	AW072003	Hs.40968	heparan sulfate	SS	2.10
	436415	BE265254	Hs.5181	proliferation-a	Peptidase_M24,TM,SS	2.10
20	407887	AA578668	Hs.41072	serine (or cyst	serpin,TM,	2.10
	447815	AI432199	Hs.247084	ESTs	LIM,TM,	2.09
	434274	AA628539	Hs.116252	ESTs, Moderate	nm,TM,SS	2.09
	411571	AA122393	Hs.70811	hypothetical pr	SS	2.09
	442525	AF150282	Hs.145945	ESTs	pkise,TM,	2.09
25	423750	AF165883	Hs.132415	prefoldin 2	TM	2.09
	449199	AI990122	Hs.196988	ESTs	ras,TM,	2.09
	415363	AI670947	Hs.78406	phosphatidylo	PIPSK,pkise,TM,SS	2.09
	418462	BE001596	Hs.85266	integrin, beta	integrin_B.fn3,TM,SS	2.09
	430335	D80007	Hs.239499	KIAA0185 protei	S1,TM,	2.08
30	443450	N66045	Hs.133529	ESTs	TM	2.08
	418753	BE217818	Hs.87016	Homo sapiens cD	TM	2.08
	439018	AW300887	Hs.26638	ESTs, Weakly si	TM,SS	2.08
	431628	AF148277	Hs.265561	CD2-associated	SH3,SS	2.08
	446528	AJ076640	Hs.15243	nucleolar prote	Nol1_Nop2_Sun,TM,	2.08
35	411372	AI147861	Hs.213289	low density lip	EGF_kd_recept_a,kd_recept_b,TM,SS	2.08
	459319	NM_000059		gb:Homo sapiens	BRCA2_repeat,TM,	2.08
	408730	AV660717	Hs.47144	DKFZP568N0819 p	TM,SS	2.08
	409220	BE243323	Hs.51233	tumor necrosis	TNFR_c6.death,TM,	2.08
	429504	X99133	Hs.204238	lipocalin 2 (on	lipocalin,SS	2.08
40	409688	AK000002	Hs.55879	Homo sapiens mR	ABC_tran,ABC_membrane,TM,	2.08
	413092	AA126856	Hs.118665	ESTs	EGF,TM,SS	2.08
	413715	AW851121	Hs.75497	Homo sapiens cD	cyelin,TM,	2.08
	423020	AA383092	Hs.1608	replication pro	TM	2.07
	438378	AW970529	Hs.86434	Homo sapiens cD	TM,SS	2.07
45	432125	AW972667	Hs.287510	Homo sapiens cD	Band_41,TM,SS	2.07
	449370	AK002114	Hs.23495	hypothetical pr	TM,SS	2.07
	454011	M31008	Hs.37009	alkaline phosph	alk_phosphatase,TM,SS	2.07
	427876	AI494291	Hs.111977	ESTs	TM	2.07
	422901	R81936	Hs.121576	aspartate beta-	SS	2.07
50	449207	AL044222	Hs.23255	nucleoporin 155	TM,SS	2.07
	408243	Y00787	Hs.624	interleukin 8	IL8,TM,SS	2.07
	448548	BE167687	Hs.156628	ESTs	Sulfotransfer,TM,SS	2.07
	423472	AF041260	Hs.129057	breast carcinom	TM	2.07
	436211	AK001581	Hs.80961	polymerase (DNA	TM	2.07
55	456157	AW979153		gb:EST391263 MA	transmembrane4,TM,	2.06
	407143	C14078	Hs.248968	EST	TM	2.06
	432440	X83597	Hs.2996	sucrase-isomalt	Glyco_hydro_31,trefoil,TM,SS	2.06
	410668	BE379794	Hs.65403	hypothetical pr	TM	2.06
	422765	AW409701	Hs.1578	baculoviral IAP	BIR,TM,	2.06
60	439832	T81829	Hs.14870	ESTs	SS	2.06
	445318	AW500652	Hs.200885	ESTs	TM	2.06
	439951	AI347067	Hs.124636	ESTs	TM,SS	2.06
	428307	W27393	Hs.183648	protein tyrosin	TM	2.06
	432584	AA928829	Hs.47099	Homo sapiens cD	SS	2.06
65	433027	AF191018	Hs.279923	putative nucleo	MMR_HSR1,TM,	2.06
	433716	AA608808	Hs.225118	ESTs	TM	2.06
	429412	NM_006235	Hs.2407	POU domain, cD	TM	2.06
	449026	BE500946	Hs.209105	ESTs	TM	2.06
	437016	AJ076916	Hs.5398	guanine monophos	GATase,GMP_synt_C,TM,	2.06
70	442547	AA306997	Hs.268362	ESTs, Weakly si	SS	2.06
	455778	BE088746		gb:CM2-BT0693-2	TM	2.06
	439975	AW328081	Hs.6817	Homo sapiens pu	TM,SS	2.06
	433037	NM_014158	Hs.279938	HSPC087 protein	TM	2.06
	440086	NM_005402	Hs.288757	v-rel simian le	ras,TM,	2.06
75	436414	BE264833	Hs.143638	WD repeat domai	WD40,TM,	2.05
	411770	NM_014278	Hs.71992	heat shock prot	HSP70,TM,	2.05
	409459	D86407	Hs.54481	low density lip	EGF_kd_recept_a,kd_recept_b,TM,SS	2.05
	436238	AK002163	Hs.301724	ESTs, Highly si	MMR_HSR1,TM,	2.05
	400517	AF242388	Hs.149585	tensin	TM	2.05
80	421904	BE143533	Hs.109309	hypothetical pr	SS	2.05
	417850	AA215724	Hs.82741	primase, polype	SS	2.05
	417491	AW376842	Hs.1085	guanylate cyclase	pkise,guanylate_cyc,ANF_receptor,TM,SS	2.05
	453775	NM_002916	Hs.35120	replication fac	AAA,TM,SS	2.05
	435525	AI831297	Hs.123310	ESTs	TM	2.05

5	412627	BE391959	Hs.74276	chloride intrac	G-patch,lg,MutS_C,TM,	2.05
	439702	AW085525	Hs.134182	ESTs	A2M,SS	2.05
	440006	AK000517	Hs.6844	hypothetical pr	TM	2.05
	417308	H60720	Hs.81892	KIAA0101 gene p	TM	2.05
	446311	AW007294	Hs.149795	ESTs, Weakly si	pkise,TM,	2.05
	427871	AW992405	Hs.59622	ESTs, Weakly si	SS	2.05
	453804	AA300204	Hs.35276	KIAA0852 protei	TM,SS	2.05
	449939	T86420	Hs.272139	ESTs	DIL,myosin_head,TM,SS	2.05
10	417819	AI253112	Hs.133540	ESTs	TM	2.04
	427747	AW411425	Hs.180655	serine/threonin	pkise,TM,	2.04
	415009	C75253	Hs.220950	ESTs	TM	2.04
	437829	AI358522	Hs.270183	ESTs	TM	2.04
	428753	AW939252	Hs.182927	hypothetical pr	TM	2.04
15	446475	AI908188	Hs.209245	ESTs	OPR,TM,	2.04
	431394	AK000692	Hs.252351	HERV-H LTR-asso	lg,TM,SS	2.04
	423701	AA329856	Hs.143022	ESTs	TM	2.04
	422369	AF005216	Hs.115541	Janus Kinase 2	SH2,pkise,TM,	2.04
	432481	AW451645	Hs.151504	Homo sapiens cD	TSPN,Collagen,TM,SS	2.04
20	443746	AW861379	Hs.160602	ESTs	TM	2.04
	400792	AA635062	Hs.50094	Homo sapiens mR	zf-C3HC4,CARD,BIR,TM,	2.04
	428343	AL043021	Hs.12705	ESTs, Weakly si	TM	2.04
	419329	AY007220	Hs.268998	S100-type calci	TM	2.04
	403485				filament,TM,	2.04
25	413313	NM_002047	Hs.75280	glycyl-tRNA syn	WHEP-TRS,7tm_2,TM,SS	2.04
	433326	AI379485	Hs.159430	ESTs	TM	2.03
	440246	W52010	Hs.191379	ESTs	serpin,TM,	2.03
	444006	BE395085	Hs.10086	type I transmem	TM,SS	2.03
	452705	H49805	Hs.246005	ESTs	TM	2.03
30	421724	AB037832	Hs.107287	KIAA1411 protei	TM	2.03
	447474	AW614220	Hs.189402	ESTs	SS	2.03
	418852	BE537037	Hs.273294	hypothetical pr	TM	2.03
	431842	NM_005764	Hs.271473	epithelial prot	TM,SS	2.03
	440773	AA352702	Hs.37747	hypothetical pr	TM	2.03
35	443425	AI056776	Hs.133397	ESTs	TM,SS	2.03
	407975	X89426	Hs.41716	endothelial cel	IGFBP,SS	2.03
	428299	AL038004	Hs.29419	ESTs	TM,SS	2.03
	415757	AA830854	Hs.187810	ESTs	TM	2.03
	432559	AW452948	Hs.257631	ESTs	PAC,TM,SS	2.03
40	425912	AL137629	Hs.162189	serine/threonin	th3,lg,PH,RhoGEF,TM,SS	2.02
	419395	BE266326	Hs.90280	5-aminimidazol	AICARFT_IMPCHas,MGS,TM,	2.02
	417576	AA339449	Hs.82285	phosphoribosylg	AIRS,formyl,transf,GARS,TM,	2.02
	418559	AA225048	Hs.104207	ESTs	TM	2.02
	410855	X97795	Hs.66718	RAD54 (S.cerevi	SNF2_N,helicase_C,TM,	2.02
45	422072	AB018255	Hs.111138	KIAA0712 gene p	TM	2.02
	419546	AA244199		gb:nc06c05.s1 N	Y_phosphatase,TM,	2.02
	450516	AA902656	Hs.21943	NIF3 (Ngg1 inte	DUF34,TM,	2.02
	419807	R77402		gb:y75f11.s1 S	TM	2.02
	438192	AI859065	Hs.16808	ESTs, Weakly si	TM,SS	2.02
50	401866				filament,TM,SS	2.02
	443129	R16075	Hs.21568	ESTs	TM,SS	2.02
	424783	AA913909	Hs.153088	TATA box bindin	TM	2.01
	413293	AL047483	Hs.75270	GTP-binding pro	ras,TM,SS	2.01
	435787	AW162767	Hs.100914	hypothetical pr	SS	2.01
55	422599	BE387202	Hs.118638	non-metastatic	NDK,SS	2.01
	431630	NM_002204	Hs.285829	integrin, alpha	FG-GAP,integrin_A,TM,SS	2.01
	448275	BE514434	Hs.20830	synaptic Ras GT	kinesin,PHD,abhydrolase_2,TM,SS	2.01
	405484				filament,SS	2.01
	436469	AK001455	Hs.5198	Down syndrome c	TM	2.01
60	451273	NM_014811	Hs.26163	KIAA0649 gene p	TM	2.01
	432378	AI493046	Hs.146133	ESTs	TM	2.01
	419981	AA897581	Hs.128773	ESTs	Ski_Soo,SS	2.01
	445808	AV655234	Hs.298083	ESTs	sushi,TM,SS	2.01
	435767	H73505	Hs.117874	ESTs	Peptidase_S8,P,TM,	2.01
65	430468	AF052573	Hs.241517	polymerase (DNA	TM	2.01
	422790	AA809875	Hs.25933	ESTs	TM	2.01
	443303	U67319	Hs.9216	caspase 7, apop	ICE_p10,ICE_p20,TM,	2.01
	410008	AA079552		gb:zm20h12.s1 S	FG-GAP,TM,SS	2.01
	440774	AI420611	Hs.127832	ESTs	zf-MYND,TM,SS	2.00
70	442961	BE614474	Hs.289074	Homo sapiens cD	TM	2.00
	424420	BE614743	Hs.146688	prostaglandin E	MAPEG,TM,SS	2.00
	410240	AL157424	Hs.61289	synaptotagmin 2	TM	2.00
	435014	BE560898	Hs.10026	ribosomal prote	Ribosomal_L17,TM,	2.00
	406752	AI285598	Hs.217493	annexin A2	TM	2.00

## TABLE 41B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

80	Pkey	CAT number	Accession
	410008	116812_1	AA079552 BE142525 BE142527
	418546	176677_1	AA224827 T59708 T59843 BE156903
	419546	185768_1	AA244199 AA244272 H57440

419807	188252_1	R77402 AA262462 AA250988 R06794
422689	219898_1	AW856665 AA315006 AW954733
431120	328264_1	AA492588 AA492498 AA492571
433748	37385_1	R12244 H71290 A1110858 AF090916 AF075357 AA011531
438223	452646_1	AA781171 A1202139 A1202098
438993	467651_1	AA828995 AA834879 A1926361
446995	702707_1	A1355012 AW812856
447197	711623_1	R36075 A1366546 R36167
450190	827655_1	T51387 AW191595 T51271 A1688285
451237	863269_1	AW600293 A1767468
455778	1364506_1	BE088746 BE088802 BE088755 BE088876 BE088947 BE088881 BE088952
456157	158261_1	AW979153 AA176967 AA826015

TABLE 41C:

**Key:** Unique number corresponding to an Eos probeset  
**Ref:** Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
**Strand:** Indicates DNA strand from which exons were predicted.  
**NI\_position:** Indicates nucleotide positions of predicted exons.

Key	Ref	Strand	NI_position
400514	9796594	Minus	78844-79025,80850-80991,89754-89941,93750-93891
401519	6649315	Plus	157315-157950
401708	2951946	Plus	154511-155298
401866	8018106	Plus	73126-73623
402075	8117407	Plus	121907-122035,122804-122921,124019-124161,124455-124610,125672-126076
403055	8748904	Minus	109532-110225
403208	7630829	Minus	147706-147903,148667-148804
403422	9665041	Minus	151169-151561
403485	9966528	Plus	2888-3001,3198-3532,3655-4117
403776	7770611	Minus	1414-1513,1624-1756
404171	9930793	Plus	173667-173783,176876-177055
404253	9367202	Minus	55675-56055
404519	8152000	Plus	12817-13000
404567	7249169	Minus	101320-101501
405484	5922025	Plus	199214-199579,199672-199920,200262-200495
405545	1054740	Plus	118577-118807,119091-119296,121626-121823
405818	4071056	Plus	29055-29196
406399	9256288	Minus	63448-63554

TABLE 42A: ABOUT 561 GENES UP-REGULATED IN STOMACH CANCER

Table 42A lists about 561 genes up-regulated in stomach cancer compared to normal stomach. These were selected as for Table 40A except using various non-malignant stomach specimens in determining the denominator value.

**Key:** Unique Eos probeset identifier number  
**ExAccn:** Exonmap Accession number, Genbank accession number  
**UnigeneID:** Unigene number  
**Unigene Title:** Unigene gene title  
**R1:** Ratio of tumor to normal tissue

Key	ExAccn	UnigeneID	Unigene Title	R1
428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin)	60.4
448693	AW004854	Hs.228320	Homo sapiens cDNA: FLJ23537 fs, clone L	28.6
428664	AK001666	Hs.189095	similar to SALL1 (sal (Drosophila)-like	26.8
422330	D30783	Hs.115263	epiregulin	22.0
415989	A1267700	Hs.111128	ESTs	21.2
439979	AW600291	Hs.6823	hypothetical protein FLJ10430	19.0
451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	17.1
403776				14.9
424905	NM_002497	Hs.153704	NIMA (never in mitosis gene a)-related k	14.8
414132	AJ801235	Hs.48480	ESTs	14.2
450375	AA009647	Hs.8850	a disintegrin and metalloproteinase doma	14.0
453922	AF053306	Hs.36708	budding uninhibited by benzimidazoles 1	13.8
436032	AA150797	Hs.109276	latexin protein	13.1
427585	D31152	Hs.179729	collagen, type X, alpha 1 (Schmid metaph	12.5
416661	AA634543	Hs.79440	IGF-II mRNA-binding protein 3	12.2
414972	BE263782	Hs.77695	KIAA0008 gene product	10.6
445900	AF070526	Hs.13429	Homo sapiens clone 24787 mRNA sequence	10.5
446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	10.5
441377	BE218239	Hs.202656	ESTs	10.2
419423	D26488	Hs.90315	KIAA0007 protein	9.8
415138	C18356	Hs.78045	tissue factor pathway inhibitor 2	9.6
424639	A1917494	Hs.131329	ESTs	9.4
412472	AW975398	Hs.293836	ESTs	9.2
447048	AW393080	Hs.228320	Homo sapiens cDNA: FLJ23537 fs, clone L	8.9
418379	AA218940	Hs.137516	figetin-like 1	8.8
423020	AA383092	Hs.1608	replication protein A3 (14kD)	8.6
408908	BE296227	Hs.48915	serine/threonine kinase 15	8.5
419948	AB041035	Hs.93847	NADPH oxidase 4	8.3
411750	BE562298	Hs.71827	KIAA0112 protein; homolog of yeast ribos	8.3
411479	AW848047		gb:IL3-CT0214-291299-052-A12 CT0214 Homo	8.1
420900	AL045633	Hs.44269	ESTs	8.0
449347	AV649748	Hs.299901	ESTs	8.0

	409041	AB033025	Hs.50081	KIAA1199 protein	8.0
	450480	X82125	Hs.25040	zinc finger protein 239	7.6
	417655	AA780791	Hs.14014	ESTs, Weakly similar to KIAA0973 protein	7.6
5	453878	AW964440	Hs.19025	ESTs	7.6
	430403	AF039390	Hs.241382	tumor necrosis factor (ligand) superfamily	7.5
	427961	AW293165	Hs.143134	ESTs	7.4
	428330	LZ2524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	7.3
	426235	AI631964	Hs.34447	ESTs	7.1
10	452291	AF015592	Hs.28853	CDC7 (cell division cycle 7, S. cerevisi	7.0
	418205	L21715	Hs.83760	troponin I, skeletal, fast	7.0
	409757	NM_001898	Hs.123114	cystatin SN	6.9
	430044	AA464510	Hs.152812	ESTs	6.6
	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	6.5
	416209	AA235776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	6.5
15	449020	AI621170	Hs.192699	ESTs	6.3
	431958	X63629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	5.8
	434699	AA643687	Hs.149425	Homo sapiens cDNA FLJ11980 fs, clone HE	5.7
	424345	AK001380	Hs.145479	Homo sapiens cDNA FLJ10518 fs, clone NT	5.6
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	5.4
20	434551	BE387162	Hs.280858	ESTs, Highly similar to XPB_HUMAN DNA-RE	5.3
	427660	AI741320	Hs.114121	Homo sapiens cDNA: FLJ23228 fs, clone C	5.0
	424960	BE245380	Hs.153952	5' nucleobase (CD73)	4.9
	400268				4.8
25	408427	AW194270	Hs.177236	ESTs	4.7
	453785	AI368236	Hs.283732	ESTs	4.7
	411274	NM_002776	Hs.69423	kalikrein 10	4.7
	424717	H03754	Hs.152213	wingless-type MMTV integration site fami	4.7
	415752	BE314524	Hs.78776	putative transmembrane protein	4.6
30	434370	AF130988	Hs.58346	downless (mouse) homolog	4.6
	431806	AF186114	Hs.270737	tumor necrosis factor (ligand) superfamily	4.6
	400205				4.6
	422938	NM_001809	Hs.1594	centromere protein A (17kD)	4.5
	406687	MI31126	Hs.272620	pregnancy specific beta-1-glycoprotein 9	4.4
35	453160	AI263307	Hs.146228	ESTs	4.4
	423871	AA331906		gb:EST35805 Embryo, 8 week I Homo sapien	4.4
	431211	M86849	Hs.5566	gap junction protein, beta 2, 28kD (conn	4.4
	446638	AL133063	Hs.15783	Homo sapiens mRNA: cDNA DKFZp434P1115 (f	4.3
	406741	AA058357	Hs.74466	carcinoembryonic antigen-related cell ad	4.3
40	411560	AW851186		gb:IL3-CT0220-150200-071-H05 CT0220 Homo	4.1
	433159	AB035898	Hs.150587	kinesin-like protein 2	4.1
	446142	AI754693	Hs.145968	ESTs	4.1
	414727	BE466904		gb:h228D3.x1 NCI_CGAP_GC6 Homo sapiens	4.1
	422285	AI803103		gb:tc14e06.x1 Soares_NhHMPv_S1 Homo sapi	4.1
45	451807	W52854	Hs.27099	DKFZP564J0863 protein	4.1
	411558	AA102670	Hs.70725	gamma-aminobutyric acid (GABA) A recepto	4.0
	415701	NM_003878	Hs.78619	gamma-glutamyl hydrolase (conjugase, fol	4.0
	409420	Z15008	Hs.54451	laminin, gamma 2 (nicein (100kD), kalini	3.9
	452909	NM_015368	Hs.30985	pannexin 1	3.9
50	443211	AI128388	Hs.143655	ESTs	3.9
	442896	R37725	Hs.261108	ESTs	3.8
	407788	BE514982	Hs.38991	S100 calcium-binding protein A2	3.8
	406671	AA129547	Hs.285754	met proto-oncogene (hepatocyte growth fa	3.8
	421155	H87879	Hs.102267	lysyl oxidase	3.8
55	420552	AK000492	Hs.98806	hypothetical protein	3.8
	420727	H75701	Hs.99888	complement component 4-binding protein,	3.7
	422665	AJ011812	Hs.119018	transcription factor NRF	3.7
	447425	AI963747	Hs.18573	acylphosphatase 1, erythrocyte (common)	3.7
	417715	AW969587	Hs.86366	ESTs	3.7
60	406076	AL390179	Hs.137011	Homo sapiens mRNA: cDNA DKFZp547P134 (fr	3.6
	452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fs, clone PL	3.6
	412723	AA648459	Hs.179912	ESTs	3.6
	452461	N78223	Hs.108106	transcription factor	3.6
	453331	AI240665	Hs.8895	ESTs	3.6
	406434				3.6
65	417956	AA210704	Hs.190465	ESTs	3.6
	410102	AW248508	Hs.279727	Homo sapiens cDNA FLJ14035 fs, clone HE	3.6
	426471	M22440	Hs.170009	transforming growth factor, alpha	3.5
	425782	U66468	Hs.159525	cell growth regulatory with EF-hand doma	3.5
70	442556	AL137761	Hs.8379	Homo sapiens mRNA: cDNA DKFZp586L2424 (f	3.5
	426957	AA393676	Hs.97459	ESTs, Weakly similar to KIAA0819 protein	3.5
	448105	AW591433	Hs.170675	ESTs, Weakly similar to TMS2_HUMAN TRANS	3.5
	414998	NM_002543	Hs.77729	oxidised low density lipoprotein (lectin	3.5
	442942	AW167087	Hs.131562	ESTs	3.4
75	416391	AI878927	Hs.79284	mesoderm specific transcript (mouse) hom	3.4
	420230	AL034344	Hs.298020	Homo sapiens cDNA FLJ11796 fs, clone HE	3.4
	408243	Y00787	Hs.624	Interleukin 8	3.4
	412978	AI431708	Hs.820	homeo box C6	3.4
	412851	AI826502	Hs.106149	ESTs	3.4
80	417720	AA205625	Hs.208067	ESTs	3.4
	414812	X72755	Hs.77367	monokine induced by gamma interferon	3.4
	453884	AA355925	Hs.36232	KIAA0186 gene product	3.4
	436596	AI683467	Hs.299112	Homo sapiens cDNA FLJ11441 fs, clone HE	3.4
	425921	NM_007231	Hs.162211	soluble carrier family 6 (neurotransmitte	3.4

	420092	AA814043	Hs.88045	ESTs	3.3
	423441	R68849	Hs.278359	absent in melanoma 1 like	3.3
	421787	AA227068	Hs.108301	nuclear receptor subfamily 2, group C, m	3.3
5	447342	AI199268	Hs.19322	ESTs	3.3
	430178	AW449612	Hs.152475	ESTs	3.3
	452826	BE245286	Hs.301636	ESTs, Moderately similar to PEX6_HUMAN P	3.3
	414821	M53835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	3.3
	413339	AI818080	Hs.194290	ESTs	3.3
10	448756	AI739241	Hs.171480	ESTs	3.3
	421948	L42583	Hs.111758	keratin 6A	3.3
	431453	AW753917		gb:RC0-CT0299-291199-031-F02 CT0299 Homo	3.3
	438538	AA832203	Hs.291955	ESTs	3.3
	439759	AL359055	Hs.67709	Homo sapiens mRNA full length insert cDN	3.3
15	431721	AB032996	Hs.268044	KIAA1170 protein	3.3
	436391	AJ227892	Hs.146274	ESTs	3.3
	442025	AW887434	Hs.11810	ESTs, Weakly similar to CD4.2 [C.elegans	3.3
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	3.2
	411678	AY071114	Hs.71465	squalene epoxidase	3.2
20	422956	BE545072	Hs.122579	hypothetical protein FLJ10461	3.2
	450400	AI694722	Hs.279744	ESTs	3.2
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	3.2
	423528	AB011137	Hs.129740	KIAA0565 gene product	3.2
	440659	AF134160	Hs.7327	claudin 1	3.2
25	441085	AW136551	Hs.181245	Homo sapiens cDNA FLJ12532 fs, clone NT	3.2
	412022	AI005043	Hs.24143	ESTs	3.2
	418203	XS4942	Hs.83758	CDC28 protein kinase 2	3.1
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	3.1
30	408633	AW963372	Hs.46677	PRO2000 protein	3.1
	445808	AV655234	Hs.298083	ESTs	3.1
	414618	AI204600	Hs.96978	ESTs	3.1
	421340	F07783	Hs.1369	decay accelerating factor for complement	3.1
	422689	AW856655		gb:RC3-CT0297-290100-013-d03 CT0297 Homo	3.1
	456508	AA502764	Hs.123469	ESTs, Weakly similar to AF208855 18M-01	3.1
35	420759	T11832	Hs.127797	ESTs	3.1
	452637	AW971231	Hs.291020	ESTs	3.1
	415857	AA866115	Hs.301645	Homo sapiens cDNA FLJ11381 fs, clone HE	3.1
	439451	AF086270	Hs.278554	heterochromatin-like protein 1	3.1
	424051	AL110203	Hs.138411	Homo sapiens mRNA; cDNA DKFZp586J1922 (I	3.1
40	440138	AB033073	Hs.6982	hypothetical protein FLJ10201	3.1
	454456	AW850984		gb:IL3-CT0220-150200-068-H08 CT0220 Homo	3.0
	429125	AA446854	Hs.271004	ESTs	3.0
	408031	AA081396	Hs.42173	Homo sapiens cDNA FLJ10366 fs, clone NT	3.0
	438394	BE379623	Hs.27693	CGI-124 protein	3.0
45	409361	NM_005982	Hs.54416	sine oculis homeobox (Drosophila) homolo	3.0
	439453	BE264974	Hs.6568	thyroid hormone receptor interactor 13	3.0
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	3.0
	422746	NM_004484	Hs.119651	glypican 3	3.0
	424947	R77952	Hs.239625	integral membrane protein 2B	3.0
50	453775	NM_002918	Hs.35120	replication factor C (activator 1) 4 (37	3.0
	449386	AA001308	Hs.193213	ESTs	3.0
	430687	BE274217	Hs.249247	heterogeneous nuclear protein similar to	2.9
	428862	NM_000346	Hs.2316	SRY (sex-determining region Y)-box 9 (ca	2.9
	401747				2.9
55	429682	NM_006306	Hs.211602	SMC1 (structural maintenance of chromoso	2.9
	444735	BE019923	Hs.243122	hypothetical protein FLJ13057 similar to	2.9
	413385	M34455	Hs.840	indoleamine-pyrrole 2,3 dioxygenase	2.9
	436222	AI208737	Hs.122810	Homo sapiens cDNA FLJ11489 fs, clone HE	2.9
	442961	BE814474	Hs.289074	Homo sapiens cDNA FLJ13986 fs, clone Y7	2.9
60	454798	AW821295		gb:PM3-ST0307-241299-002-g03 ST0307 Homo	2.9
	421650	AA781795	Hs.122587	ESTs	2.9
	434398	AA121098	Hs.3838	serum-inducible kinase	2.9
	420153	N22120	Hs.75277	hypothetical protein FLJ13910	2.9
	435706	W31254	Hs.7045	GL004 protein	2.9
65	416065	BE267931	Hs.78996	proliferating cell nuclear antigen	2.9
	423250	BE081918	Hs.125849	chromosome 8 open reading frame 2	2.8
	423493	AI815965	Hs.129683	ubiquitin-conjugating enzyme E2D 1 (homo	2.8
	430242	U66669	Hs.236642	3-hydroxyisobutyryl-Coenzyme A hydrolase	2.8
	436411	AW674352		gb:ba63c07.y1 NIH_MGC_12 Homo sapiens cD	2.8
70	411770	NM_014278	Hs.71992	heat shock protein (hsp110 family)	2.8
	437834	AA769294		gb:nz35g03.s1 NC1_CGAP_GCB1 Homo sapiens	2.8
	400440	X83957	Hs.83870	nebulin	2.8
	444743	AA045648	Hs.11817	nudix (nucleoside diphosphate linked moi	2.8
	428725	AI565937	Hs.98692	ESTs	2.8
75	417771	AA804698	Hs.82547	retinoic acid receptor responder (lazaru	2.8
	449420	AI654852	Hs.196562	ESTs, Highly similar to TS24 MOUSE PROTE	2.8
	433929	AI375499	Hs.27379	ESTs	2.8
	430287	AW182459	Hs.125759	ESTs, Weakly similar to tumor suppressor	2.8
	423346	AI267677	Hs.127416	synaptotagmin 1	2.8
80	407824	AA147884	Hs.9812	ESTs	2.8
	408482	NM_000676	Hs.45743	adenosine A2b receptor	2.8
	425188	AK002052	Hs.155071	hypothetical protein FLJ11190	2.8
	456999	AA319798	Hs.172247	eukaryotic translation elongation factor	2.8
	408875	NM_015434	Hs.48604	DKFZP434B168 protein	2.8

5	407839	AA045144	Hs.161566	ESTs	2.7
	409012	AL117435	Hs.49725	DKFZP434I216 protein	2.7
	410762	AF226053	Hs.66170	HSKM-B protein	2.7
	426925	NM_001196	Hs.172894	BHQ interacting domain death agonist	2.7
	410116	AW630671	Hs.58636	squamous cell carcinoma antigen recogniz	2.7
	428398	AI249368	Hs.98558	ESTs	2.7
	400048			AFFX control: YEL002c/WBP1	2.7
	412140	AA219691	Hs.73625	RAB6 interacting, kinasin-like (rabklines	2.7
10	435664	AI032087	Hs.269819	ESTs	2.7
	405695			ESTs	2.7
	456655	AI376736	Hs.111779	secreted protein, acidic, cysteine-rich	2.7
	408670	AF160967	Hs.46784	potassium large conductance calcium-acti	2.7
	422576	BE548555	Hs.118554	CGI-83 protein	2.7
15	431379	AA504264	Hs.182937	peptidylprolyl isomerase A (cyclophilin	2.7
	429540	M85776		gb:EST02297 Fetal brain, Stratagene (cat	2.7
	426874	N67325	Hs.247132	ESTs	2.7
	433183	AF231338	Hs.222024	transcription factor BMAL2	2.7
	409902	AI337658	Hs.156351	ESTs	2.7
20	422338	AI781322	Hs.115285	dihydrolipoamide S-acetyltransferase (E2	2.7
	408434	AW195317	Hs.107716	Homo sapiens cDNA: FLJ22344 fs, clone H	2.7
	432328	AI572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	2.7
	407633	NM_007069	Hs.37189	similar to rat HREV107	2.6
	419216	AL076718	Hs.164021	small inducible cytokine subfamily B (Cy	2.6
25	422363	T55979	Hs.115474	replication factor C (activator 1) 3 (38	2.6
	445564	AB028957	Hs.12896	KIAA1034 protein	2.6
	401644			ESTs	2.6
	417479	AI057052	Hs.133554	ESTs	2.6
	434217	AW014795	Hs.23349	ESTs	2.6
30	426514	BE616633	Hs.301122	bone morphogenetic protein 7 (osteogenic	2.6
	414800	BE538690		gb:601064676F1 NIH_MGC_10 Homo sapiens c	2.6
	400289	X07820	Hs.2258	matrix metalloproteinase 10 (stromelysin	2.6
	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	2.6
	421246	AW582962	Hs.300961	ESTs, Highly similar to AF151805 1 CGI-4	2.6
35	430397	AI924533	Hs.105607	ESTs	2.6
	428048	AA705745	Hs.185070	ESTs	2.6
	452092	BE245374	Hs.27842	hypothetical protein FLJ11210	2.6
	440052	AI833744	Hs.195648	ESTs	2.6
	433077	AA314262	Hs.289008	Homo sapiens cDNA: FLJ21814 fs, clone H	2.6
40	432407	AA221036	Hs.285026	HERV-H LTR-associating 1	2.6
	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	2.6
	451813	NM_016117	Hs.27182	phospholipase A2-activating protein	2.6
	410889	X91662	Hs.66744	twist (Drosophila) homolog (acrocephalos	2.6
	440100	BE382685	Hs.158549	ESTs	2.6
45	413746	AA133243	Hs.171553	ESTs	2.6
	414737	AI160386	Hs.125087	ESTs	2.6
	422063	BE156476		gb:QV0-HT0368-040100-082-c05 HT0368 Homo	2.6
	418250	U29926	Hs.83918	adenosine monophosphate deaminase (isoto	2.6
50	437641	AA811452	Hs.291911	ESTs	2.6
	436027	AI884053	Hs.39972	ESTs, Weakly similar to I38588 reverse t	2.6
	444381	BE387335	Hs.283713	ESTs, Weakly similar to CAS4_HUMAN COLLA	2.6
	452571	W31518	Hs.34665	ESTs	2.6
	452862	AW378065	Hs.8687	ESTs	2.6
55	411984	NM_005419	Hs.72888	signal transducer and activator of trans	2.6
	446440	AV658411	Hs.42656	Homo sapiens cDNA FLJ12667 fs, clone NT	2.6
	448663	BE614599	Hs.106823	H.sapiens gene from PAC 42616, similar t	2.6
	426427	M86695	Hs.169840	TTK protein kinase	2.6
	445848	AA774824	Hs.13377	Homo sapiens clone 23649 and 23755 unkno	2.6
60	420022	AA256253	Hs.120817	ESTs	2.6
	451418	BE387790	Hs.26369	hypothetical protein FLJ20287	2.6
	428953	AA306610	Hs.194676	DKFZP434C013 protein	2.6
	424008	R02740	Hs.137555	putative chemokine receptor, GTP-binding	2.6
	417863	AB000450	Hs.82771	vaccinia related kinase 2	2.6
65	414987	AA524394	Hs.165544	ESTs	2.6
	440249	AI246590	Hs.125325	ESTs	2.6
	407966	AA295052	Hs.38516	ESTs	2.5
	406685	M18728		gb:Human nonspecific crossreacting antiq	2.5
	403204			ESTs	2.5
70	436961	AW375974	Hs.156704	ESTs	2.5
	422260	AA315993	Hs.105484	ESTs, Weakly similar to LITB_HUMAN LITHO	2.5
	444471	AB020684	Hs.11217	KIAA0877 protein	2.5
	430290	AI734110	Hs.136355	ESTs	2.5
	413670	AB000115	Hs.75470	hypothetical protein, expressed in osteo	2.5
	421928	AF013758	Hs.109643	polyadenylate binding protein-interactin	2.5
75	439580	AF086401	Hs.293847	ESTs	2.5
	439963	AW247529	Hs.6793	platelet-activating factor acetylhydrola	2.5
	457065	AI476318	Hs.192480	ESTs	2.5
	439521	AI808955	Hs.58248	ESTs	2.5
	426711	AA383471	Hs.180669	conserved gene amplified in osteosarcoma	2.5
80	422631	BE218919	Hs.118793	hypothetical protein FLJ10688	2.5
	417856	AW067903	Hs.82772	collagen, type XI, alpha 1	2.5
	416975	NM_004131	Hs.1051	granzyme B (granzyme 2, cytotoxic T-lymp	2.5
	415947	U04045	Hs.78934	mutS (E. coli) homolog 2 (colon cancer,	2.5
	454678	AV813089		gb:RC3-ST0185-240400-111-b05 ST0186 Homo	2.5

5	424080	AW189983	Hs.139119	Homo sapiens cDNA FLJ10967 fs, clone PL	2.5
	426572	AB037783	Hs.170623	hypothetical protein FLJ11183	2.5
	440594	AW445167	Hs.126036	ESTs	2.5
	428264	AA424839	Hs.98484	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.5
	408750	BE294069	Hs.93581	hypothetical protein FLJ10512	2.5
	451177	AJ969716	Hs.13034	ESTs	2.5
	449318	AW236021	Hs.108788	ESTs, Weakly similar to zeste [D.melanog	2.5
	434414	AJ788376		gb:tr34b07.x1 NCJ_CGAP_Ov23 Homo sapiens	2.5
10	400240				2.5
	410519	AW612264	Hs.131705	ESTs	2.5
	440953	AJ683036	Hs.124135	KIAA1618 protein	2.5
	421190	U95031	Hs.102482	mucin 5, subtype B, tracheobronchial	2.5
	444478	W07318	Hs.240	M-phase phosphoprotein 1	2.5
15	442295	AJ827248	Hs.224398	Homo sapiens cDNA FLJ111469 fs, clone HE	2.5
	420894	AA744597	Hs.88854	ESTs	2.5
	410094	BE147897	Hs.58593	general transcription factor IIF, polype	2.4
	413998	AW103807	Hs.243933	ESTs	2.4
	412281	AJ810054	Hs.141119	ESTs	2.4
20	418105	AW937488	Hs.178000	ESTs	2.4
	447335	BE617695	Hs.286192	protein phosphatase 1, regulatory (inhib	2.4
	446852	AW451643	Hs.257479	ESTs, Weakly similar to AF147747 1 BOG25	2.4
	408915	NM_016651	Hs.48950	hepaticellular carcinoma novel gene-3 pro	2.4
	442991	BE261236	Hs.8888	hypothetical protein FLJ20424	2.4
25	410193	AJ132592	Hs.59757	zinc finger protein ZB1	2.4
	410664	NM_006033	Hs.65370	lipase, endothelial	2.4
	449264	AJ637649	Hs.196105	ESTs	2.4
	423453	AW450737	Hs.128791	OGI-09 protein	2.4
	433757	AJ949974	Hs.152670	ESTs	2.4
30	411598	BE336654	Hs.70937	H3 histone family, member K	2.4
	413657	AJ345227	Hs.105448	ESTs, Weakly similar to B34087 hypoteti	2.4
	429663	M68874	Hs.211587	phospholipase A2, group IVA (cytosolic,	2.4
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	2.4
	419559	Y07828	Hs.91096	ring finger protein	2.4
35	419839	U24577	Hs.93304	phospholipase A2, group VII (platelet-ac	2.4
	419713	AW968058	Hs.92381	nucleix (nucleoside diphosphate linked mol	2.4
	413281	AA861271	Hs.34396	ESTs	2.4
	402819				2.4
40	431457	NM_012211	Hs.256297	integrin, alpha 11	2.4
	422564	AJ148006	Hs.222120	ESTs	2.4
	443683	BE241717	Hs.9676	uncharacterized hypothalamus protein HT0	2.4
	407242	M18728		gb:Human nonspecific crossreacting antig	2.4
	409235	AA188827	Hs.7988	ESTs, Weakly similar to endo-alpha-D-man	2.4
	408938	AA059013	Hs.22607	ESTs	2.4
45	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	2.4
	423217	NM_000094	Hs.1640	collagen, type VII, alpha 1 (epidermolys	2.4
	408321	AW405882	Hs.44205	cortistatin	2.4
	419086	NM_000218	Hs.89591	Kellmann syndrome 1 sequence	2.4
	452945	AW978187	Hs.31086	Homo sapiens mRNA for cytochrome b5, par	2.4
50	452234	AW084176	Hs.223296	ESTs	2.4
	427722	AK000123	Hs.180479	hypothetical protein FLJ20116	2.4
	430399	AJ916284	Hs.199671	ESTs	2.4
	450737	AW007152	Hs.203330	ESTs	2.4
	428513	BE220806	Hs.184697	Homo sapiens clone 23785 mRNA sequence	2.4
	405454				2.4
55	422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	2.3
	421462	AF016495	Hs.104624	aquaporin 9	2.3
	403416	AJ744626	Hs.301506	ESTs, Highly similar to KIAA0564 protein	2.3
	422039	BE567832	Hs.82148	hypothetical protein	2.3
60	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	2.3
	429145	AJ694923	Hs.49031	ESTs	2.3
	423198	M81933	Hs.1634	cell division cycle 25A	2.3
	442914	AW188551	Hs.99519	Homo sapiens cDNA FLJ14007 fs, clone Y7	2.3
	449042	AW294985	Hs.301148	potassium voltage-gated channel, Isk-rel	2.3
65	421308	AA687322	Hs.192843	ESTs	2.3
	419926	AW900992	Hs.93796	DKFZP586D2223 protein	2.3
	429992	AL050053	Hs.227397	Homo sapiens mRNA; cDNA DKFZp566E103 (tr	2.3
	440601	N62409	Hs.126688	ESTs	2.3
	445232	AJ281848	Hs.165547	ESTs	2.3
	410174	AA306007	Hs.59461	DKFZP434C245 protein	2.3
70	452110	T47667	Hs.28005	Homo sapiens mRNA; cDNA DKFZp564G2463 (I	2.3
	422493	AW474183	Hs.233816	ESTs	2.3
	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	2.3
	411098	U80034	Hs.68583	mitochondrial intermediate peptidase	2.3
75	426457	AW894667	Hs.169965	chimerin (chimaerin) 1	2.3
	442029	AW956699	Hs.14456	neural precursor cell expressed, develop	2.3
	445545	AJ431798	Hs.164192	ESTs, Weakly similar to Y161_HUMAN HYPOT	2.3
	422094	AF129535	Hs.272027	F-box only protein 5	2.3
	421933	FS8881	Hs.109655	sex comb on midleg (Drosophila)-like 1	2.3
80	430001	AJ580056	Hs.98992	ESTs	2.3
	420802	U22376	Hs.1334	v-myb avian myeloblastosis viral oncogen	2.3
	402053				2.3
	415666	H72693		gb:yu03c11.r1 Soares fetal liver spleen	2.3
	432743	AJ146966	Hs.101656	ESTs	2.3

	433409	AI278802	Hs.25661	ESTs	2.3
	408330	AW182602	Hs.24954	ESTs	2.3
	407807	AL031427	Hs.40094	Human DNA sequence from clone 167A19 on	2.3
5	436972	AA284879	Hs.25640	claudin 3	2.3
	436747	AW977192	Hs.291343	ESTs	2.3
	433730	AK002135	Hs.3542	hypothetical protein FLJ11273	2.3
	414839	X63692	Hs.77462	DNA (cytosine-S)-methyltransferase 1	2.3
	438192	AI859065	Hs.16808	ESTs, Weakly similar to paraplegin-like	2.3
10	415339	NM_015156	Hs.78398	KIAA0071 protein	2.3
	449539	W80363	Hs.58446	ESTs	2.2
	412651	AA115333	Hs.107968	ESTs	2.2
	450956	AW193531	Hs.205647	ESTs, Moderately similar to ALU1_HUMAN A	2.2
	430335	D80007	Hs.239499	KIAA0185 protein	2.2
15	417849	AW291587	Hs.82733	nidogen 2	2.2
	454946	AW846378		gb:OV0-CT0179-090200-090-CT0179 Homo	2.2
	412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	2.2
	408349	BE546947	Hs.44276	homeo box C10	2.2
	424704	AI263293	Hs.152096	cytochrome P450, subfamily IJ (arachido	2.2
20	419433	AA814807	Hs.7395	hypothetical protein FLJ23182	2.2
	409632	W74001	Hs.55279	serine (or cysteine) proteinase inhibito	2.2
	415323	BE269352	Hs.949	neutrophil cytosolic factor 2 (65kD, chr	2.2
	417531	NM_003157	Hs.1087	serine/threonine kinase 2	2.2
	403137				2.2
25	428479	Y00272	Hs.184572	cell division cycle 2, G1 to S and G2 to	2.2
	430200	BE613337	Hs.234896	geminin	2.2
	433745	AF075320	Hs.28980	Homo sapiens clone HQ0270	2.2
	425390	AI092634	Hs.156114	protein tyrosine phosphatase, non-recept	2.2
	408380	AF123050	Hs.44532	diubiquitin	2.2
30	422424	AI188431	Hs.116577	prostate differentiation factor	2.2
	431548	AI834273	Hs.9711	Homo sapiens cDNA FLJ13018 fs, clone NT	2.2
	400298	AA032279	Hs.61635	six transmembrane epithelial antigen of	2.2
	428771	AB028992	Hs.193143	KIAA1069 protein	2.2
	411571	AA122393	Hs.70811	hypothetical protein FLJ20516	2.2
35	442573	H93366	Hs.7567	Homo sapiens cDNA: FLJ21962 fs, clone H	2.2
	412802	U41518	Hs.74602	aquaporin 1 (channel-forming integral pr	2.2
	412530	AA766268	Hs.266273	Homo sapiens cDNA FLJ13348 fs, clone OV	2.2
	414761	AU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	2.2
	408432	AW195262		gb:un67b05.x1 NCL_CGAP_CML1 Homo sapiens	2.2
40	440283	AI732892	Hs.190489	ESTs	2.2
	429568	AI088691	Hs.208414	Homo sapiens mRNA: cDNA DKFZp564D0472 (I	2.2
	424003	BE274717	Hs.137506	Homo sapiens BAC clone RP11-120J2 from 7	2.2
	425300	AW601773	Hs.270259	ESTs	2.2
	448568	AA149121	Hs.71947	ESTs	2.2
45	419229	AI827237	Hs.282884	ESTs	2.2
	420982	AW576160	Hs.100729	KIAA0692 protein	2.2
	403258				2.2
	439653	AW021103	Hs.6631	hypothetical protein FLJ20373	2.2
	426827	AW067805	Hs.172665	methyleneetetrahydrofolate dehydrogenase	2.2
50	444514	AI682905	Hs.270431	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.2
	426298	AW965058	Hs.111583	ESTs	2.2
	453322	U63630	Hs.155637	protein kinase, DNA-activated, catalytic	2.2
	421662	NM_014141	Hs.108552	cell recognition molecule Caspr2	2.2
	412505	AA974491	Hs.21734	ESTs	2.2
55	438788	AA825716		gb:rod29e10.s1 NCL_CGAP_GCB1 Homo sapiens	2.2
	429058	AF138863	Hs.194827	hypothetical protein FLB6421	2.2
	423104	AI005273	Hs.123647	antigenic determinant of recA protein (m	2.2
	410406	AI969703	Hs.301842	ESTs	2.2
	443180	R15875	Hs.70945	ESTs	2.2
60	419235	AW470411	Hs.288433	neurotrophin	2.2
	421379	Y15221	Hs.103382	small inducible cytokine subfamily B (Cy	2.2
	422609	AK001379	Hs.121028	hypothetical protein FLJ10549	2.2
	415058	AW902848	Hs.273829	ESTs	2.2
	418049	AA211467	Hs.190488	hypothetical protein FLJ10120	2.2
65	436209	AW850417	Hs.254020	ESTs, Moderately similar to unnamed prot	2.2
	408042	AL049233	Hs.42244	Homo sapiens mRNA: cDNA DKFZp564A023 (tr	2.2
	425692	D90041	Hs.155956	N-acetyltransferase 1 (arylamine N-acety	2.2
	409665	NM_006731	Hs.55777	Fukuyama type congenital muscular dystro	2.2
	428157	AI738719	Hs.298668	ESTs	2.2
70	410480	R97457	Hs.63984	cadherin 13, H-cadherin (heart)	2.2
	429732	U20158	Hs.2488	lymphocyte cytosolic protein 2 (SH2 doma	2.2
	414747	U30872	Hs.77204	centromere protein F (350/400kD, mitosis	2.2
	425843	BE313280	Hs.159627	death associated protein 3	2.2
	445299	AI910382	Hs.118727	Homo sapiens cDNA FLJ13692 fs, clone PL	2.1
75	436251	BE515065	Hs.5092	nucleolar protein (KKE/D repeat)	2.1
	430066	AI929659	Hs.237825	signal recognition particle 72kD	2.1
	422516	BE258862	Hs.117950	multifunctional polypeptide similar to S	2.1
	407870	AB032990	Hs.40719	hypothetical protein KIAA1164	2.1
	416109	AI420311	Hs.126550	suppressor of K+ transport defect 1	2.1
80	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S	2.1
	448089	AI467945	Hs.173696	ESTs	2.1
	441790	AW294909	Hs.132208	ESTs	2.1
	400022			AFFX control: STAT1	2.1
	428728	NM_016625	Hs.191381	hypothetical protein	2.1



	414366	BE549143		gb:601076456F1 NIH_MGC_12 Homo sapiens c	2.1
	409929	R38772	Hs.172619	KIAA1106 protein	2.1
	405264				2.1
5	445625	BE246743	Hs.288529	Homo sapiens cDNA: FLJ22635 fs, clone H	2.1
	408949	AF189011	Hs.49163	putative ribonuclease III	2.1
	424513	BE385864	Hs.149894	mitochondrial translational initiation f	2.1
	433683	AI817723	Hs.22678	hypothetical protein FLJ21832	2.1
	442952	AI743261	Hs.131860	ESTs	2.1
10	441020	W79283	Hs.35962	ESTs	2.1
	446770	AV660309	Hs.154986	ESTs, Weakly similar to AF137386 1 plasm	2.1
	432378	AI493046	Hs.146133	ESTs	2.1
	447769	AW873704	Hs.48764	ESTs	2.1
	412654	AI093480	Hs.29263	Homo sapiens cDNA FLJ11896 fs, clone HE	2.1
15	445669	AI570830	Hs.174870	ESTs	2.1
	417979	AU077284	Hs.83081	GTP cyclohydrolase I feedback regulatory	2.1
	433849	BE465884	Hs.280728	ESTs	2.1
	437928	NM_005476	Hs.5920	UDP-N-acetylglucosamine-2-epimerase/N-ac	2.1
	457341	BE181716		gb:QV1-HT0639-150500-198-e03 HT0639 Homo	2.1
20	452833	BE559681	Hs.30736	KIAA0124 protein	2.1
	403055				2.1
	414581	AA256213	Hs.72010	ESTs	2.1
	432840	AK001403	Hs.279521	hypothetical protein FLJ20530	2.1
	418994	AA296520	Hs.89546	selectin E (endothelial adhesion molecu	2.1
25	440908	AI915225	Hs.126735	ESTs	2.1
	417621	AV654894	Hs.82316	interferon-induced, hepatitis C-associat	2.1
	435895	AF073335	Hs.5338	carbonic anhydrase XII	2.1
	455716	BE070263		gb:QV4-BT0407-280100-090-e07 BT0407 Homo	2.1
	408420	NM_006915	Hs.299481	Homo sapiens mRNA; cDNA DKFZp586B0118 (I	2.1
30	435849	BE305242	Hs.112442	ESTs, Weakly similar to CLDE_HUMAN CLAUD	2.1
	424308	AW975531	Hs.154443	minichromosome maintenance deficient (S.	2.1
	433644	AW342028	Hs.256112	ESTs	2.1
	400020			AFFX control: STAT1	2.1
	434064	AL049045	Hs.180758	hypothetical protein PRO0082	2.1
35	410650	AI061118	Hs.65328	Fanconi anemia, complementation group F	2.1
	404076				2.1
	441362	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E coli Ra	2.1
	422515	AW500470	Hs.117950	multifunctional polypeptide similar to S	2.1
	444863	AW384082	Hs.301323	ESTs	2.1
40	445867	AF272663	Hs.13405	gephyrin	2.1
	441021	AW578716	Hs.7644	H1 histone family, member 2	2.1
	446595	T57448	Hs.15487	hypothetical protein FLJ20725	2.1
	417515	L24203	Hs.82237	ataxia-telangiectasia group D-associated	2.1
	412428	AV650262	Hs.75765	GRO2 oncogene	2.1
45	449207	AL044222	Hs.23255	nucleoporin 155kD	2.1
	412095	AI624707	Hs.5921	Homo sapiens cDNA: FLJ21592 fs, clone C	2.1
	400861				2.1
	448826	AI580252	Hs.293246	ESTs, Weakly similar to putative p150 (H	2.1
	440591	AA431599	Hs.132799	Homo sapiens cDNA: FLJ23451 fs, clone H	2.1
50	426181	AA371422	Hs.69844	ESTs, Weakly similar to dJ191N21.1 (HLa	2.1
	452880	AA029332	Hs.87549	ESTs	2.1
	421878	AA299652	Hs.111496	Homo sapiens cDNA FLJ11643 fs, clone HE	2.1
	442104	L20971	Hs.188	phosphodiesterase 4B, cAMP-specific (dun	2.1
	427224	AL135554	Hs.101937	slime occlus homeobox (Drosophila) homolo	2.1
55	446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	2.1
	432487	AA550988	Hs.221472	ESTs	2.1
	429534	AW976987	Hs.163327	ESTs	2.1
	446051	BE048061	Hs.153315	ESTs	2.1
	447760	AI431328	Hs.291179	ESTs, Weakly similar to topoisomerase I	2.1
60	422675	BE018517	Hs.119140	eukaryotic translation initiation factor	2.1
	415173	AW501735	Hs.253015	ESTs	2.1
	425170	AU077315	Hs.154970	transcription factor CP2	2.1
	453751	R38762	Hs.101282	Homo sapiens mRNA; cDNA DKFZp434B102 (tr	2.1
	426283	NM_003937	Hs.169139	kynureninase (L-kynurenine hydrolase)	2.1
65	417874	BE616160	Hs.82829	protein tyrosine phosphatase, non-recept	2.1
	449555	AW450288	Hs.195390	ESTs	2.1
	439699	AF086534	Hs.187561	ESTs, Moderately similar to ALU1_HUMAN A	2.1
	427413	BE547647	Hs.177781	superoxide dismutase 2, mitochondrial	2.1
	424673	AA345051	Hs.294092	ESTs	2.1
70	407802	D84145	Hs.39913	novel RGD-containing protein	2.0
	452834	AI638627	Hs.105685	ESTs	2.0
	436895	AW007021	Hs.82894	ESTs	2.0
	446035	NM_006558	Hs.13565	Sam68-like phosphotyrosine protein, T-ST	2.0
	406981	S71129	Hs.296844	Acetylcholinesterase (I4-E5 domain) (huma	2.0
75	427001	NM_006482	Hs.173135	dual-specificity tyrosine-(Y)-phosphoryl	2.0
	439223	AW238299	Hs.23945	ESTs	2.0
	432343	NM_002960	Hs.2961	S100 calcium-binding protein A3	2.0
	414890	BE281095	Hs.77573	uridine phosphorylase	2.0
	423019	AI640185	Hs.225816	ESTs	2.0
80	435905	AW997484	Hs.5003	KIAA0456 protein	2.0
	422278	AF072873	Hs.114218	frizzled (Drosophila) homolog 6	2.0
	439608	AW864696	Hs.26198	Homo sapiens cDNA: FLJ23363 fs, clone H	2.0
	432114	AL036021	Hs.225597	ESTs	2.0
	405545				2.0

418201	AA214345	Hs.98445	Homo sapiens cDNA: FLJ21652 fs, clone C	2.0
442528	AF150317	Hs.134217	ESTs	2.0
446237	AW270515	Hs.149596	ESTs	2.0
428074	BE387770	Hs.182378	colony stimulating factor 2 receptor, al	2.0
423430	AF112481	Hs.128501	RAD54, S. cerevisiae, homolog of, B	2.0
435767	H73505	Hs.117874	ESTs	2.0
432945	AL043683	Hs.271357	ESTs, Weakly similar to unnamed protein	2.0
428792	BE535955	Hs.193602	chromosome condensation protein G	2.0
404170				2.0
410286	A1739159	Hs.61898	DKFZP586N2124 protein	2.0
434565	T52172		ghyb22d01.s1 Stratagene fetal spleen (9	2.0
422610	AF153820	Hs.1547	potassium inwardly-rectifying channel, s	2.0
417933	X02308	Hs.82962	thymidylate synthetase	2.0
441384	AA447849	Hs.288660	protease, serine, 23	2.0
437403	A1208149	Hs.121186	ESTs	2.0
412673	AL042957	Hs.31845	ESTs	2.0
414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	2.0
438426	AA835936	Hs.269763	ESTs	2.0
413943	AW294416	Hs.144687	ESTs	2.0
449001	A1619967	Hs.189854	ESTs	2.0
427674	NM_003528	Hs.2178	H2B histone family, member Q	2.0
435425	H16263	Hs.31416	ESTs	2.0
433364	A1075407	Hs.296083	ESTs	2.0
429782	NM_005754	Hs.220689	Ras-GTPase-activating protein SH3-domain	2.0
417366	BE185289	Hs.1076	small proline-rich protein 18 (cornitin)	2.0
426746	J03626	Hs.2057	uridine monophosphate synthetase (orotat	2.0
411943	BE502436	Hs.7962	ESTs, Weakly similar to putative J.C.eleg	2.0
414266	BE267834		gb:601124428F1 NIH_MGC_8 Homo sapiens cD	2.0
432677	NM_004482	Hs.278611	UDP-N-acetyl-alpha-D-galactosamine:polyp	2.0
450534	A1570189	Hs.25132	KIAA0470 gene product	2.0
446715	A1337735	Hs.173919	ESTs	2.0

TABLE 42B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

408432	1058667_1	AW195262 R27868 AWB11262	
411479	1247077_1	AWB48047 AWB48202 AWB48631 AWB48142 AWB48702 AWB48121 AWB48632 AWB48140 AWB48571 AWB48009 AWB48067 AWB48069 AWB48905	
		AWB48214	
411560	1249443_1	AWB51188 AW996967 BE143456	
414266	1430984_1	BE267834 BE514180 BE514096	
414366	1438636_1	BE549143 BE390613 BE277344	
414727	1481204_1	BE466904 W28721	
414800	1491863_1	BE538690 T40217	
415666	1543492_1	H72693 R08673 H72694 F20990 R08580	
422063	210852_1	BE156476 BE156473 BE156474 BE156475 AA302839	
422285	214669_1	A1803103 A1885143 AW470793 AW450703 A1090784 AW271587 AW236950 AW242783	
422689	219896_1	AWB56665 AA315006 AW954733	
423871	232749_1	AA331906 AA332484	
429540	305828_1	M85776 AA454535 AA456208 H90189	
431453	333457_1	AW753917 BE152926 AA505333 BE155673	
434414	38585_1	A1798378 S46400 AWB111617 AWB111616 W00557 BE142245 AWB58232 AWB61851 AWB58382 AA232351 AA218567 AA055556 AWB58231	
		AWB57541 AWB14172 H66214 AWB14398 AF134164 AA243093 AA173345 AA199942 AA223384 AA227092 AA227080 T12379 AA092174 T61139	
		AA149776 AA699829 AWB79188 AWB13567 AWB13538 A1267168 AA157718 AA157719 AA100472 AA100774 AA130756 AA157705 AA157730	
		AA157715 AA053524 AWB49581 AWB54566 C05254 AWB82836 T92637 AWB12621 AA206583 AA209204 BE156909 AA226824 A1829309 AWB981957	
		N66951 AA527374 H66215 AA045564 A1694265 H60808 AA149726 AW195620 BE081333 BE073424 AWB17662 AWB17705 AWB17703 AWB17659	
		BE081531 H59570	
434565	38898_1	T52172 AF147324 T52248	
436411	419334_1	AWB74352 AA715374 Z25205	
437834	443674_1	AA769294 AW749299 AW749302 AW749295 AW749304 AW749293 AW749298 AW749294 AW749288 AW749291 AW749292 AW749295	
		AW749289 AW749287 BE535498	
438788	465159_1	AA825716 AW978859 AA828841	
454456	1207088_1	AWB50984 AW752836 M86124	
454678	1228915_1	AWB13089 W28102	
454798	1235104_1	AWB21295 AWB21272 AWB21282	
454946	1245753_1	AWB46376 AWB46375 AWB46434 AWB46287 AWB46365 AWB46554 AWB46384 AWB46290 AWB46356 AWB46474	
455716	1352695_1	BE070263 BE070195 BE070265 BE070202 BE070233 BE070399 BE070203	
457341	322221_1	BE181716 AWB48314 AWB01848 AW948320 AW983981 AA484444	

TABLE 42C:

Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

400861	9757506	Plus	163855-164016
401644	8576138	Plus	82655-83959
401747	9789672	Minus	118596-118816, 119119-119244, 119609-119761, 120422-120990, 130161-130381, 130468-130593, 131097-131258, 131866-131932, 132451-132575, 133580-134011

5	402053	8083229	Plus	62703-63179
	402819	6729581	Plus	29217-29422
	403055	8748904	Minus	109532-110225
	403137	9211494	Minus	92349-92572,92958-93084,93579-93712,93949-94072,94591-94748,95214-95337
	403204	7622392	Plus	16214-16439
	403258	7770439	Minus	156251-156619
	403776	7770611	Minus	1414-1513,1624-1756
	404076	9931752	Minus	3848-3967
10	404170	9830793	Plus	168836-169248
	405264	7329374	Plus	28556-28684
	405454	7656675	Plus	133807-134053
	405545	1054740	Plus	118677-118807,119091-119296,121626-121823
	405695	4309958	Plus	51860-52162
15	408434	9256551	Minus	17803-17931

TABLE 43A: ABOUT 339 GENES UP-REGULATED IN STOMACH CANCER

Table 43A lists about 339 genes up-regulated in stomach cancer compared to normal stomach that are likely to be extracellular or cell-surface proteins. These were selected as for Table 42A and the predicted protein contained a structural domain that is indicative of surface or extracellular localization (e.g. Ig, fn3, egl, 7tm domains). Predicted protein domains are noted.

	Play:	Unique Eos probe set identifier number			
	ExAccn:	Exemplar Accession number, Genbank accession number			
	UnigeneID:	Unigene number			
25	Unigene Title:	Unigene gene title			
	PSDomain:	Protein Structural Domain			
	R1:	Ratio of tumor to normal tissue			
	Play	ExAccn	UnigeneID	Unigene Title	PSDomain
					R1
30	428368	BE440042	Hs.83326	matrix metallo	60.4
	428664	AK001666	Hs.189095	similar to SALL	26.8
	422330	D30763	Hs.115263	epiregulin	22.0
	439979	AW600291	Hs.6823	hypothetical pr	19.0
35	451099	RS2795	Hs.25954	interleukin 13	17.1
	403776				14.9
	424905	NM_002497	Hs.153704	NIMA (never in	14.8
	453922	AF053306	Hs.36708	budding uninhib	13.8
40	436032	AA150797	Hs.109276	latexin protein	13.1
	427585	D31152	Hs.179729	collagen, type	12.5
	416661	AA834543	Hs.79440	IGF-II mRNA-bin	12.2
	414972	BE263782	Hs.77695	KIAA0008 gene p	10.6
45	446619	AU076643	Hs.313	secreted phosph	10.5
	415138	C18356	Hs.78045	tissue factor p	9.6
	423020	AA383092	Hs.1608	replication pro	8.6
	408908	BE296227	Hs.48915	serine/threonin	8.5
50	419948	AB041035	Hs.93847	NADPH oxidase 4	8.3
	411750	BE562298	Hs.71827	KIAA0112 protel	8.3
	420900	AL045633	Hs.44269	ESTs	8.0
	450480	X82125	Hs.25040	zinc finger pro	7.6
55	417655	AA780791	Hs.14014	ESTs, Weakly si	7.6
	430403	AF039390	Hs.241382	tumor necrosis	7.5
	428330	L22524	Hs.2256	matrix metallo	7.3
	452291	AF015592	Hs.28853	CDC7 (cell divi	7.0
60	418205	L21715	Hs.83760	troponin I, ske	7.0
	409757	NM_001898	Hs.123114	cystatin, SS	6.9
	444783	AK001468	Hs.62180	anilin (Drosop	6.5
	416209	AA236776	Hs.79078	MAD2 (mitotic a	6.5
65	431958	X63629	Hs.2877	cadherin 3, typ	5.8
	424345	AK001380	Hs.145479	Homo sapiens cD	5.6
	428227	AA321649	Hs.2248	small inducible	5.4
	424960	BE245380	Hs.153952	5' nucleotidase	4.9
70	400268			Myosin_tail, SS	4.8
	411274	NM_002776	Hs.69423	kallikrein 10	4.7
	415752	BE314524	Hs.78776	putative transm	4.6
	431806	AF186114	Hs.270737	tumor necrosis	4.6
75	400205			SS	4.6
	422938	NM_001809	Hs.1594	centromere prot	4.5
	406687	M31126	Hs.272620	pregnancy speci	4.4
	423871	AA331906		gb:EST35805 Emb	4.4
80	431211	M85849	Hs.5566	gap junction pr	4.4
	445638	AL133063	Hs.15783	Homo sapiens mR	4.3
	406741	AA058357	Hs.74468	carcinoembryoni	4.3
	411560	AW851186		gb:IL3-CT0220-1	4.1
	433159	AB035898	Hs.150587	kinesin-like pr	4.1
	422285	AI803103		gb:14e06.x1 S	4.1
	451807	W52854	Hs.27099	DKFZP564J0863 p	4.1
	411558	AA102670	Hs.70725	gamma-aminobuty	4.0
	415701	NM_003878	Hs.78619	gamma-glutamyl	4.0
	409420	Z15008	Hs.54451	laminin, gamma	3.9
	452909	NM_015368	Hs.30985	pannexin 1	3.9
	407788	BE514982	Hs.38991	S100 calcium-bi	3.8
	421155	H87879	Hs.102267	lysyl oxidase	3.8
	420552	AK000492	Hs.98806	hypothetical pr	3.8
	420727	H75701	Hs.99886	complement comp	3.7

	422665	AJ011812	Hs.119018	transcription f	R3H,G-patch,GTP_CDC,TM,SS	3.7
	4417425	AJ963747	Hs.18573	acylphosphatase	Acylphosphatase,TM,	3.7
	406076	AL390179	Hs.137011	Homo sapiens mR	TM	3.6
5	406434				heme_1,TM,	3.6
	417956	AA210704	Hs.190465	ESTs	sushi,,SS	3.6
	410102	AW248508	Hs.279727	Homo sapiens cD	TM,SS	3.6
	426471	M22440	Hs.170009	transforming gr	EGF,TM,SS	3.5
	425782	U66468	Hs.159525	cell growth reg	SS	3.5
10	426957	AA393676	Hs.97459	ESTs, Weakly si	SS	3.5
	448105	AW591433	Hs.170675	ESTs, Weakly si	trypsin,TM,	3.5
	414998	NM_002543	Hs.77729	oxidised low de	TM	3.5
	442942	AW167087	Hs.131562	ESTs	kinase,TM,SS	3.4
	416391	AJ878927	Hs.79284	mesoderm specif	glyhydrolase,TM,SS	3.4
15	420230	AL034344	Hs.298020	Homo sapiens cD	Fork_head,TM,	3.4
	408243	Y00787	Hs.624	interleukin 8	IL8,TM,SS	3.4
	412978	AJ431708	Hs.820	homeo box C6	homeobox,TM,	3.4
	412851	AJ826502	Hs.106149	ESTs	TM,SS	3.4
	414812	X72755	Hs.77367	monokine induce	IL8,,SS	3.4
20	453884	AA355925	Hs.36232	KIAA0186 geno p	TM	3.4
	425921	NM_007231	Hs.162211	solute carrier	SNF,TM,	3.4
	421787	AA227068	Hs.108301	nuclear recepto	TM	3.3
	447342	AJ199268	Hs.19322	ESTs	TM,SS	3.3
	452826	BE245286	Hs.301636	ESTs, Moderate	AAA,TM,	3.3
25	414821	M63835	Hs.77424	Fc fragment of	lg,TM,SS	3.3
	448756	AJ739241	Hs.171480	ESTs	TM	3.3
	421948	L42583	Hs.111758	keratin 6A	filament,TM,	3.3
	438538	AA832203	Hs.291955	ESTs	TM	3.3
	436391	AJ227892	Hs.146274	ESTs	SS	3.3
30	418007	M13509	Hs.83169	matrix metallo	hemopexin,Peptidase_M10,,SS	3.2
	411678	AJ907114	Hs.71465	squalene epoxid	Monooxygenase,TM,	3.2
	422956	BE545072	Hs.122579	hypothetical pr	TM	3.2
	450400	AJ694722	Hs.279744	ESTs	TM	3.2
	440659	AF134160	Hs.7327	claudin 1	PMP22,Claudin,TM,SS	3.2
35	418203	X54942	Hs.83758	CDC28 protein k	CKS,TM,	3.1
	416111	AA033813	Hs.79018	chromatin assem	TM,SS	3.1
	445808	AV655234	Hs.298083	ESTs	sushi,TM,SS	3.1
	421340	F07783	Hs.1369	docoy accelerat	sushi,,SS	3.1
40	422689	AW856665		gb:RC3-CT0297-2	SNF2_N,TM,	3.1
	439431	AF086270	Hs.278554	heterochromatin	chromo,Chromo_shadow,,SS	3.1
	454456	AW850984		gb:IL3-CT0220-1	tn3,TM,SS	3.0
	429125	AA446854	Hs.271004	ESTs	TM	3.0
	409361	NM_005982	Hs.54416	sine oculis hom	homeobox,,SS	3.0
	439453	BE264974	Hs.6566	thyroid hormone	AAA,TM,	3.0
45	414896	AF002020	Hs.76918	Niemann-Pick di	Patched,TM,SS	3.0
	422746	NM_004484	Hs.119651	glypican 3	Glypican,TM,SS	3.0
	453775	NM_002916	Hs.35120	replication fac	AAA,TM,SS	3.0
	428882	NM_000346	Hs.2318	SRV (sex-determ	HMG_box,TM,	2.9
	401747				filament,TM,	2.9
50	429682	NM_006306	Hs.211602	SMC1 (structura	SMC_C,SMC_N,TM,	2.9
	413385	M34455	Hs.840	indoleamine-pyr	IDO,TM,	2.9
	442961	BE614474	Hs.289074	Homo sapiens cD	TM	2.9
	421650	AA781795	Hs.122587	ESTs	TM	2.9
55	434398	AA121098	Hs.3838	serum-inducible	kinase,POLO_box,TM,	2.9
	435706	W31254	Hs.7045	GL004 protein	PDEase,TM,	2.9
	416065	BE267931	Hs.78996	proliferating c	TM	2.9
	423493	AJ815965	Hs.129683	ubiquitin-conju	UQ_con,,SS	2.8
	430242	U66669	Hs.236642	3-hydroxyisobut	TM	2.8
60	411770	NM_014278	Hs.71892	heat shock prot	HSP70,TM,	2.8
	400440	X83957	Hs.83870	nebulin	TM	2.8
	444743	AA045648	Hs.11817	nudix (nucleosi	nudT,TM,	2.8
	417771	AA804698	Hs.82547	retinoic acid r	TM	2.8
	430287	AW182459	Hs.125759	ESTs, Weakly si	TM,SS	2.8
65	408482	NM_000676	Hs.45743	adenosine A2b r	7tm_1,TM,SS	2.8
	425188	AK002052	Hs.155071	hypothetical pr	TM	2.8
	456999	AA319798	Hs.172247	eukaryotic tran	SS	2.8
	408875	NM_015434	Hs.48604	DKFZP434B168 pr	TM	2.8
	409012	AL117435	Hs.49725	DKFZP434I216 pr	RhoGEF,TM,	2.7
70	410782	AF226053	Hs.66170	HSKM-8 protein	zf-MYND,,SS	2.7
	426925	NM_001198	Hs.172894	BH3 interacting	TM	2.7
	410116	AW630671	Hs.58638	squamous cell c	TM,SS	2.7
	428398	AJ249368	Hs.98558	ESTs	SS	2.7
	412140	AA219691	Hs.73625	RAB5 interactin	kinasin,TM,SS	2.7
75	456655	AJ378736	Hs.111779	secreted protei	kazal,,SS	2.7
	408670	AF160967	Hs.46784	potassium large	TM,SS	2.7
	422576	BE548555	Hs.118554	CGI-83 protein	lactamase_B,,SS	2.7
	431379	AA504264	Hs.182937	peptidylprolyl	TM	2.7
80	433183	AF231338	Hs.222024	transcription f	HLH,PAS,TM,SS	2.7
	432328	AJ572739	Hs.195471	6-phosphofructo	PGAM,6PF2K,TM,	2.7
	407633	NM_007069	Hs.37189	similar to ret	TM,SS	2.6
	419216	AJ076718	Hs.164021	small inducible	IL8,TM,SS	2.6
	422363	T55979	Hs.115474	replication fac	TM	2.6
	401644				zf-C2H2,TM,	2.6
	417479	AJ057052	Hs.133554	ESTs	CARD,TM,	2.6

5	426514	BE616633	Hs.301122	bone morphogene	TGF-beta,TGFb_propeptide,TM,SS	2.6
	400289	X07820	Hs.2258	matrix metallo	hemopexin, SS	2.6
	418478	U38945	Hs.1174	cyclin-dependen	ank,TM,SS	2.6
	421246	AW582962	Hs.300961	ESTs, Highly si	PolyA_pol,TM	2.6
	428048	AA705745	Hs.185070	ESTs	AMP-binding,TM	2.6
	452092	BE245374	Hs.27842	hypothetical pr	Acyltransferase,TM,SS	2.6
	440052	AI833744	Hs.195648	ESTs	PAC,TM,SS	2.6
	452401	NM_007115	Hs.29352	tumor necrosis	Xlink,CUB,TM,SS	2.6
10	451813	NM_016117	Hs.27182	phospholipase A	WD40, SS	2.6
	410889	X91662	Hs.66744	twist (Drosophi	HLH,TM	2.6
	422063	BE156476		gb:QVO-HT0368-0	SS	2.6
	418250	U29926	Hs.83918	adenosine monop	A_deaminase,TM	2.6
	437641	AA811452	Hs.291911	ESTs	TM	2.6
15	452571	W31518	Hs.34665	ESTs	TM	2.6
	411984	NM_005419	Hs.72988	signal transduc	SH2,STAT,SS	2.6
	426427	M86699	Hs.169840	TTK protein kin	kinase,TM	2.6
	445848	AA774824	Hs.13377	Homo sapiens cl	TM	2.6
	420022	AA256253	Hs.120817	ESTs	SS	2.6
20	451418	BE387790	Hs.26369	hypothetical pr	TM	2.6
	428953	AA306610	Hs.194676	OKFZP434C013 pr	arl,TNFR_c6,DEAD,Statmin,TM,SS	2.6
	424008	R02740	Hs.137555	putative chemok	7tm_1,TM	2.6
	417863	AB000450	Hs.82771	vaccinia relate	kinase,TM,SS	2.6
	436961	AW375974	Hs.156704	ESTs	TM	2.5
25	413670	AB000115	Hs.75470	hypothetical pr	TM	2.5
	421928	AF013758	Hs.109643	polyadenylate b	SS	2.5
	439963	AW247529	Hs.6793	platelet-activa	PAF-AH,HMG_box,kinase,TM	2.5
	426711	AA383471	Hs.180669	conserved gene	TM	2.5
	422631	BE218919	Hs.118793	hypothetical pr	TM	2.5
30	417866	AW067903	Hs.82772	collagen, type	TSPN,Collagen,COLFI,SS	2.5
	416975	NM_004131	Hs.1051	granzyme B (gra	trypsin,SS	2.5
	415947	U04045	Hs.78934	mutS (E. coli)	MutS_C,MutS_N,TM	2.5
	454678	AW813089		gb:RC3-ST0188-2	TPR,Ribosomal_SS,TM,SS	2.5
35	426572	AB037783	Hs.170623	hypothetical pr	PH,FYVE,TM	2.5
	426264	AA424839	Hs.98484	ESTs, Weakly si	TM	2.5
	444478	W07318	Hs.240	M-phase phospho	kinasin,SS	2.5
	442295	AI827248	Hs.224398	Homo sapiens cD	Collagen,COLFI,vwc,TM,SS	2.5
	410094	BE147897	Hs.58593	general transcr	TFIIF_beta,TM	2.4
	413998	AW103807	Hs.243933	ESTs	TPR,TM,SS	2.4
40	412281	AI810054	Hs.14119	ESTs	Ribosomal_S7e,TM	2.4
	446852	AW451643	Hs.257479	ESTs, Weakly si	TM	2.4
	408915	NM_016651	Hs.48950	heptacellular c	TM,SS	2.4
	442991	BE281238	Hs.8886	hypothetical pr	TM	2.4
	410193	AJ132592	Hs.59757	zinc finger pro	zf-C2H2,TM	2.4
45	410664	NM_006033	Hs.65370	lipase, endothe	Ribosomal_L22,lipase,PLAT,TM,SS	2.4
	423453	AW450737	Hs.128791	CGI-09 protein	Granin,COP-OR_P_transf,TM	2.4
	411598	BE336654	Hs.70937	H3 histone fami	histone,SS	2.4
	429663	M68874	Hs.211587	phospholipase A	C2,PLA2_B,TM	2.4
	428242	H55709	Hs.2250	leukemia inhibi	Ulf_OSM,SS	2.4
50	419559	Y07828	Hs.91096	ring finger pro	zf-C3HC4,zf-B_box,TM	2.4
	419839	U24577	Hs.93304	phospholipase A	SS	2.4
	402819				IBR,TM	2.4
	431457	NM_012211	Hs.256297	integrin, alpha	FG-GAP,vwa,TM,SS	2.4
55	443683	BE241717	Hs.9676	uncharacterized	DUF157,TM	2.4
	422158	L10343	Hs.112341	protease inhibi	wap,SS	2.4
	423217	NM_000094	Hs.1640	collagen, type	fn3,Collagen,Kunitz_BPTI,vwa,SS	2.4
	408321	AW405882	Hs.44205	coristatin	TM	2.4
	419086	NM_000216	Hs.89591	Kalman syndro	fn3,wap,SS	2.4
	427722	AK000123	Hs.180479	hypothetical pr	PH,SS	2.4
	405454				TM	2.4
60	422168	AA586894	Hs.112408	S100 calcium-bi	ethand,TM	2.3
	421462	AF016495	Hs.104624	aquaporin 9	MIP,TM	2.3
	403416	AI744626	Hs.301506	ESTs, Highly si	SS	2.3
	448988	Y09763	Hs.22785	gamma-aminobuty	neur_chan,TM,SS	2.3
65	423198	M81933	Hs.1634	cell division c	Rhodanese,SS	2.3
	419926	AW900992	Hs.93796	DKFZP586D2223 p	SS	2.3
	429992	AL050053	Hs.227397	Homo sapiens mR	fn3,TM,SS	2.3
	446232	AI281848	Hs.165547	ESTs	7tm_3,TM	2.3
	422493	AW474183	Hs.233818	ESTs	TM	2.3
70	407047	X65965		gb:H.sapiens SO	sodfa,TM	2.3
	411096	U80034	Hs.68583	mitochondrial i	Peptidase_M3,	2.3
	426457	AW894667	Hs.169965	chimerin (chima	DAG_PE-bind,RhoGAP,TM	2.3
	446545	AI431798	Hs.164192	ESTs, Weakly si	TM	2.3
	422094	AF129535	Hs.272027	F-box only prot	TM	2.3
75	421933	R98881	Hs.109655	sex comb on mid	SAM,TM	2.3
	430001	AI580058	Hs.98992	ESTs	TM	2.3
	420802	U22376	Hs.1334	v-myb avian mye	TM	2.3
	402053				gpdh,SS	2.3
	432743	AI145966	Hs.101656	ESTs	SS	2.3
80	433409	AI278802	Hs.25661	ESTs	PWWP,PHD,bromodomain,TM	2.3
	408330	AW182602	Hs.249954	ESTs	TM,SS	2.3
	407807	AL031427	Hs.40094	Human DNA seque	T4_deiodinase,TM	2.3
	436972	AA284679	Hs.25640	claudin 3	PMP22_Claudin,TM,SS	2.3
	433730	AK002135	Hs.3542	hypothetical pr	TM,SS	2.3

5	414839	X63692	Hs.77462	DNA (cytosine-5	zf-CXXC,BAH,TM,SS	2.3
	438192	A1859065	Hs.16808	ESTs, Weakly si	TM,SS	2.3
	415339	NM_015156	Hs.78398	KIAA0071 protei	ELM2,TM,	2.3
	449539	W80363	Hs.58446	ESTs	pkinese,Furin-like,Recep_L_domain,TM,SS	2.2
	450956	AW193531	Hs.205647	ESTs, Moderate	pkinese,TM,SS	2.2
	430335	D80007	Hs.239499	KIAA0185 protei	S1,TM,	2.2
	417849	AW291587	Hs.82733	nidogen 2	EGF,ldl_recept_b,thyroglobulin_1,TM,SS	2.2
	412326	R07566	Hs.73817	small inducible	IL8,SS	2.2
10	408349	BE546947	Hs.44276	homeo box C10	homeobox,TM,	2.2
	424704	A1263293	Hs.152096	cytochrome P450	p450,SS	2.2
	409632	W74001	Hs.55279	serine (or cyst	serpin,TM,	2.2
	415323	BE269352	Hs.949	neutrophil cyto	SH3,TPR,TM,	2.2
	417531	NM_003157	Hs.1087	serine/threonin	pkinese,TM,	2.2
	403137				nm,TM,SS	2.2
15	428479	Y00272	Hs.184572	cell division c	pkinese,TM,SS	2.2
	430200	BE613337	Hs.234896	geminin	TM,SS	2.2
	425390	A092634	Hs.156114	protein tyrosin	lg,Opioids_neuropep,TM,SS	2.2
	408380	AF123050	Hs.44532	diubiquitin	ubiquitin,7tm_3,ANF_receptor,sushi,7tm_1,TM,	2.2
20	422424	A188431	Hs.116577	prostate differ	TGF-beta,SS	2.2
	400298	AA032279	Hs.61635	six transmembra	TM	2.2
	411571	AA122393	Hs.70811	hypothetical pr	SS	2.2
	412802	U41518	Hs.74602	aquaporin 1 (ch	MIP,TM,	2.2
	414761	AJ077228	Hs.77256	enhancer of zes	SET,TM,	2.2
25	408432	AW195262		gb:xn67b05.x1 N	TM,SS	2.2
	429568	A088691	Hs.208414	Homo sapiens mR	mlto_carr,TM,	2.2
	425300	AW601773	Hs.270259	ESTs	TM	2.2
	439553	AW021103	Hs.6631	hypothetical pr	TM,SS	2.2
	426827	AW067805	Hs.172665	methyltetrahydr	THF_OHG_CYH,FTHS,TM,	2.2
30	444514	A0682905	Hs.270431	ESTs, Weakly si	chMP_binding,TM,SS	2.2
	425322	U63630	Hs.155637	protein kinase,	MCM,TM,	2.2
	421662	NM_014141	Hs.106552	cell recognitio	laminin_G,TM,SS	2.2
	438788	AA825716		gb:cd29e10.s1 N	ank,death,RHD,TM,	2.2
	429058	AF138863	Hs.194827	hypothetical pr	TM	2.2
35	423104	AJ005273	Hs.123647	antigenic deter	TM	2.2
	410406	AJ969703	Hs.301842	ESTs	FGGY,TM,	2.2
	421379	Y15221	Hs.103982	small inducible	IL8,TM,SS	2.2
	422809	AK001379	Hs.121028	hypothetical pr	IQ,TM,	2.2
	418049	AA211467	Hs.190488	hypothetical pr	TM	2.2
40	436209	AW850417	Hs.254020	ESTs, Moderate	TM,SS	2.2
	408042	AL049233	Hs.42244	Homo sapiens mR	TM	2.2
	425692	D90041	Hs.155956	N-acetyltransfe	Acetyltransf2,TM,	2.2
	409665	NM_006731	Hs.55777	Fukuyama type c	SS	2.2
	428157	AJ738719	Hs.298668	ESTs	hexokinase,TM,	2.2
45	410480	R97457	Hs.63984	cadherin 13, H-	cadherin,TM,SS	2.2
	429732	U20158	Hs.2488	lymphocyte cyto	SH2,TM,	2.2
	414747	U30872	Hs.77204	centromere prot	SS	2.2
	425843	BE313280	Hs.159627	death associata	TM	2.2
	445299	AJ910382	Hs.118727	Homo sapiens cD	HLH,TM,	2.1
50	436251	BE515065	Hs.5092	nucleolar prote	Nop,TM,SS	2.1
	430066	AJ929659	Hs.237825	signal recogniti	TPR,SS	2.1
	427528	AU077143	Hs.179565	minichromosome	MCM,TM,SS	2.1
	448089	AA467945	Hs.173696	ESTs	TM,SS	2.1
	428728	NM_016625	Hs.191381	hypothetical pr	TM	2.1
55	409929	R38772	Hs.172619	KIAA1106 protei	TM	2.1
	405264				SS	2.1
	445625	BE246743	Hs.288529	Homo sapiens cD	TM	2.1
	408949	AF189011	Hs.49163	putative ribonu	Ribonuclease_3,TM,SS	2.1
	424513	BE385864	Hs.149894	mitochondrial i	GTP_EFTU,IF2,TM,	2.1
60	433683	A1817723	Hs.22678	hypothetical pr	SS	2.1
	442952	A1743261	Hs.131860	ESTs	TM	2.1
	432378	A1493046	Hs.146133	ESTs	TM	2.1
	417979	AU077284	Hs.83081	GTP cyclohydrol	TM,SS	2.1
	433849	BE465884	Hs.280728	ESTs	SS	2.1
65	437928	NM_005476	Hs.5920	UDP-N-acetylglu	ROK,Epimerase_2,TM,	2.1
	403055				filament,TM,SS	2.1
	432840	AK001403	Hs.279521	hypothetical pr	TM	2.1
	418994	AA296520	Hs.89546	selectin E (end	EGF,lectin_c,sushi,TM,SS	2.1
	440908	AJ915225	Hs.126735	ESTs	TM	2.1
70	417621	AV654694	Hs.82316	interferon-indu	TM	2.1
	435895	AF037335	Hs.5338	carbonic anhydr	carb_anhydrase,TM,SS	2.1
	408420	NM_006915	Hs.299481	Homo sapiens mR	TM	2.1
	434064	AL049045	Hs.180758	hypothetical pr	cadherin,TM,SS	2.1
	404076				RmaAD,TM,	2.1
75	422515	AW500470	Hs.117950	multifunctional	AIRC,SAICAR_synth,TM,	2.1
	445867	AF272663	Hs.13405	gephyrin	MoCF_biosynth,TM,	2.1
	441021	AW578716	Hs.7644	H1 histone fami	linker_histone,TM,	2.1
	446595	T57448	Hs.15467	hypothetical pr	TM,SS	2.1
	417515	L24203	Hs.82237	ataxia-tetangle	zf-B_box,SS	2.1
80	412429	AV650262	Hs.75765	GRO2 oncogene	IL8,TM,SS	2.1
	449207	AL044222	Hs.23255	nucleoporin 155	TM,SS	2.1
	412095	A1824707	Hs.5921	Homo sapiens cD	TM,SS	2.1
	400861				pkinese,TM,	2.1
	440591	AA431599	Hs.132799	Homo sapiens cD	TM	2.1

442104	L20971	Hs.188	phosphodiesterase	PDEase,TM,	2.1
446921	AB012113	Hs.16530	small inducible	IL8,SS	2.1
446051	BE048081	Hs.153315	ESTs	Reprolysin,Pep_M12B_propep,TM,SS	2.1
422675	BE018517	Hs.119140	eukaryotic tran	elfF-5a,TM,	2.1
425170	AU077315	Hs.154970	transcription f	TM	2.1
453751	R38762	Hs.101282	Homo sapiens mR	TM	2.1
426283	NM_003937	Hs.169139	lynnenrinase (L	TM	2.1
417874	BE615160	Hs.82829	protein tyrosin	Y_phosphatase,TM,	2.1
449555	AW450288	Hs.195390	ESTs	TM	2.1
439699	AF086534	Hs.187561	ESTs, Moderatel	TM	2.1
427413	BE547647	Hs.177781	superoxide dism	sodfa,TM,	2.1
407802	D84145	Hs.39913	novel RGD-conta	hexapep,TM,SS	2.0
446035	NM_006558	Hs.13565	Sam68-like phos	TM	2.0
406981	S71129	Hs.296844	Acetylcholinest	COesterase,TM,SS	2.0
432343	NM_002960	Hs.2961	S100 calcium-bi	S_100,efhand,TM,SS	2.0
414890	BE281095	Hs.77573	uridine phospho	PNP_UDP_1,TM,SS	2.0
423019	AU640185	Hs.225816	ESTs	SS	2.0
422278	AF072873	Hs.114218	fizzled (Droso	Fz,Fizzled,TM,SS	2.0
405545				ABC_tran,ABC_membrane,TM,SS	2.0
446237	AW270515	Hs.149596	ESTs	bZIP,TM,	2.0
428074	BE387770	Hs.182378	colony stimulat	SS	2.0
423430	AF112481	Hs.128501	RAD54, S. cerev	SNF2_N,helicase_C,TM,	2.0
435767	H73505	Hs.117874	ESTs	Peptidase_S8,P,TM,	2.0
432945	AL043683	Hs.271357	ESTs, Weakly si	PK,SS	2.0
404170				sodfa,TM,	2.0
422610	AF153820	Hs.1547	potassium inwar	IRK,TM,	2.0
417933	X02308	Hs.82962	thymidylate syn	thymidylat_synth,SS	2.0
441384	AA447849	Hs.288660	protease, serin	TM	2.0
414020	NM_002984	Hs.75703	small inducible	IL8,SS	2.0
427674	NM_003528	Hs.2178	H2B histone fam	histone,TM,SS	2.0
435425	H16263	Hs.31416	ESTs	TM	2.0
429782	NM_005754	Hs.220689	Ras-GTPase-acti	rm,NTF2,SS	2.0
417366	BE185289	Hs.1076	small protine-r	Cornifn,TM,	2.0
426746	J03626	Hs.2057	uridine monopho	Pribosyltran,OMPdecase,TM,	2.0
432677	NM_004482	Hs.278611	UDP-N-acetyl-al	Glycos_transf_2,Ricin_B_lectin,TM,	2.0

TABLE 43B:

Key: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Key	CAT number	Accession
408432	1058667_1	AW195262 R27868 AW811262
411560	1249443_1	AW851186 AW996967 BE143456
422063	210852_1	BE156476 BE156473 BE156474 BE156475 AA302839
422285	214669_1	AI803103 AI885143 AW470793 AW450703 AI090784 AW271587 AW236950 AW242783
422689	219896_1	AW856665 AA315006 AW954733
423871	232749_1	AA331906 AA332484
438788	465159_1	AA825716 AW978859 AA828841
454456	1207088_1	AW850984 AW752836 MB6124
454678	1228915_1	AW813089 W28102

TABLE 43C:

Key: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

Key	Ref	Strand	NL_position
400861	9757505	Plus	163855-164016
401644	8576138	Plus	82655-83959
401747	9789672	Minus	118596-118816,119119-119244,119609-119761,120422-120990,130161-130381,130468-130593,131097-131258,131866-131932,132451-132575,133580-134011
402053	8083229	Plus	62703-63179
402819	6729581	Plus	29217-29422
403055	8748904	Minus	109532-110225
403137	9211494	Minus	92349-92572,92958-93084,93579-93712,93949-94072,94591-94748,95214-95337
403776	7770611	Minus	1414-1513,1624-1756
404076	9931752	Minus	3848-3967
404170	9930793	Plus	168836-169248
405264	7329374	Plus	28556-28684
405454	7856675	Plus	133807-134053
405645	1054740	Plus	118677-118807,119091-119296,121626-121823
406434	9256651	Minus	17803-17931

TABLE 44A: ABOUT 314 GENES DOWN-REGULATED IN STOMACH CANCER

Table 44A lists about 314 genes significantly down-regulated in stomach cancer compared to normal stomach. These were selected as for Table 42A, except that the numerator and denominator were switched.

Key: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number

Unigene Title: R1:	Unigene gene title Ratio of tumor to normal tissue			
5	Pkey	ExAccn	UnigeneID	Unigene Title
	412859	NM_000705	Hs.813	ATPase, H <sup>+</sup> /K <sup>+</sup> exchanging, beta polypept
	415447	Z97171	Hs.78454	myocilin, trabecular meshwork inducible
	427469	AA403084	Hs.269347	ESTs
	407486	S69741		gb:SCG-3=stomach cancer geno-3 (oncogen
10	428602	AL137479	Hs.186655	Homo sapiens mRNA; cDNA DKFZp434M0223 (f
	402761	BE387621	Hs.108809	chaperonin containing TCP1, subunit 7 (e
	443547	AW271273	Hs.23767	Homo sapiens cDNA FLJ12666 fs, clone NT
	430130	AL137311	Hs.234074	Homo sapiens mRNA; cDNA DKFZp761G02121 (
	435473	NS3650	Hs.260881	ESTs
15	455826	BE144228		gb:MR0-HT0165-140200-009-d04 HT0165 Homo
	402015			ESTs
	430664	AW969834		gb:EST381912 MAGE resequences, MAGK Homo
	444515	AW204908	Hs.169979	ESTs
	429201	X03178	Hs.188248	group-specific component (Mtarin D bind
20	434424	A1811202	Hs.125385	Homo sapiens cDNA: FLJ23523 fs, clone L
	450940	A1744943	Hs.300744	ESTs, Moderately similar to ALU7_HUMAN A
	400811	AF219139	Hs.87726	KIAA0154 protein; ADP-ribosylation facto
	424596	AB020639	Hs.151017	estrogen-related receptor gamma
	403670			ESTs
25	410234	NM_003837	Hs.61255	fructose-1,6-bisphosphatase 2
	407462	AJ252011		gb:Homo sapiens partial mRNA for amilor
	405110			ESTs
	402760			ESTs
	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKFZp564N1662 (f
30	413724	AA131466	Hs.23767	Homo sapiens cDNA FLJ12666 fs, clone NT
	431514	AW972363	Hs.25956	gb:EST384454 MAGE resequences, MAGL Homo
	451103	R52804	Hs.246977	DKFZP564D206 protein
	452033	AW273741	Hs.164073	ESTs
	440058	AJ932662	Hs.164073	ESTs
	405645			ESTs
35	429093	NM_000253	Hs.195799	microsomal triglyceride transfer protein
	445627	AW818475	Hs.7363	ESTs
	425679	X05997	Hs.159177	lipase, gastric
	417296	L36196	Hs.81884	sulfotransferase family, cytosolic, 2A,
40	443537	O13305	Hs.203	cholecystokinin B receptor
	435654	AW139612	Hs.131041	ESTs
	406326			ESTs
	454120	AB032990	Hs.40719	hypothetical protein KIAA1164
	455541	AW993005		gb:RC2-BN0032-160200-013-d04 BN0032 Homo
45	453989	M63962	Hs.36992	ATPase, H <sup>+</sup> /K <sup>+</sup> exchanging, alpha polypept
	407261	L03172		gb:Homo sapiens cell-type T-cell immunog
	451062	AL110125	Hs.25910	Homo sapiens mRNA; cDNA DKFZp564C1416 (f
	429350	AJ754634	Hs.131987	ESTs
	411021	F00055	Hs.172004	titin
50	441212	AW242447	Hs.146182	ESTs, Weakly similar to lactase phloriz
	450572	AJ700863	Hs.202494	Homo sapiens cDNA FLJ13245 fs, clone OV
	444922	AJ921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL
	421562	AA530994	Hs.105803	ghrelin precursor
	457432	NM_005136	Hs.268538	potassium voltage-gated channel, Isk-rel
55	418421	R58620	Hs.85050	phospholamban
	424104	AA669515	Hs.144950	ESTs
	422582	AA312660		gb:EST183335 Jurkat T-cells VI Homo sapi
	417332	AW972717	Hs.288462	Homo sapiens cDNA: FLJ21511 fs, clone C
	432440	X63597	Hs.2996	sucrose-isomaltase
60	448520	AB002387	Hs.21355	doublecortin and CaM kinase-like 1
	401989			ESTs
	452528	AA742457	Hs.291479	ESTs
	412569	H63789	Hs.296288	ESTs, Weakly similar to KIAA0638 protein
	434779	AF163815	Hs.50151	potassium inwardly-rectifying channel, s
	406255			ESTs
65	419293	AA746282	Hs.255659	ESTs
	428649	AL045716	Hs.188228	Homo sapiens cDNA FLJ11003 fs, clone PL
	410036	R57171	Hs.57975	calsequestrin 2, cardiac muscle
	414502	AL133721	Hs.224680	ESTs
70	432113	AA935065	Hs.152385	ESTs
	413808	J00287	Hs.182183	caldesmon 1
	451406	AJ694320	Hs.6295	ESTs, Weakly similar to T17248 hypotheti
	434745	AW974445	Hs.185155	ESTs, Weakly similar to HuEMAP (H.sapien
	420444	AJ905985	Hs.111805	ESTs
75	445200	AA084460	Hs.12409	somatostatin
	415314	N88802	Hs.5422	glycoprotein M6B
	427019	AA001732	Hs.173233	hypothetical protein FLJ10970
	431152	AW970998		gb:EST383083 MAGE resequences, MAGK Homo
	432306	Y18207	Hs.274315	protein phosphatase 1, regulatory (inhib
80	401775			ESTs
	440059	AW467335	Hs.257676	ESTs
	436089	AA804957	Hs.119840	ESTs
	447071	AW236867	Hs.244376	ESTs
	435604	AA625279	Hs.26892	uncharacterized bone marrow protein BM04



5	423968	AF098277	Hs.136529	solute carrier family 23 (nucleobase tra	0.32
	445487	AI806287	Hs.201217	ESTs	0.32
	421296	NM_002668	Hs.103253	perilipin	0.32
	427138	N77624	Hs.173717	phosphatidic acid phosphatase type 2b	0.33
	449916	T50525	Hs.299221	ESTs	0.33
10	446393	AW014174	Hs.151707	ESTs	0.33
	446632	AI333565	Hs.159073	diacylglycerol kinase, eta	0.33
	428070	T63918	Hs.182313	retinol-binding protein 2, cellular	0.33
	421451	AA291377	Hs.50831	ESTs	0.33
	405817				0.33
15	454790	AW820852		gb:RC2-ST0301-120200-011-112 ST0301 Homo	0.33
	413679	BE156765		gb:RC1-HT0370-120100-012-c09 HT0370 Homo	0.34
	404121				0.34
	433084	M18079	Hs.282265	fatty acid binding protein 2, intestinal	0.34
	413079	BE064382		gb:RC4-BT0310-110300-015-c12 BT0310 Homo	0.34
20	403059				0.35
	458987	AW750067	Hs.205386	ESTs	0.35
	429609	AF002246	Hs.210863	cell adhesion molecule with homology to	0.35
	423371	AU076819	Hs.1650	solute carrier family 26, member 3	0.35
	424765	AA428211	Hs.284256	hypothetical protein FLJ14033 similar to	0.35
25	451818	A1819018		gb:ts54R01.x1 NCI_CGAP_Kid8 Homo sapiens	0.35
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	0.35
	405742				0.35
	403429				0.35
	443622	AJ911527	Hs.11805	ESTs	0.36
30	404973				0.36
	444567	AV654020	Hs.184261	ESTs, Weakly similar to putative type II	0.36
	412228	AW503785	Hs.73792	complement component (3d/Epstein Barr vi	0.36
	407110	AA018042	Hs.95078	ESTs	0.36
	411671	BE049094	Hs.278567	ESTs	0.36
35	430800	NM_000805	Hs.2681	gastrin	0.36
	454560	AW807281		gb:MR4-ST0062-240300-003-g01 ST0062 Homo	0.36
	444536	AJ161068	Hs.14780	ESTs	0.36
	454042	H22570	Hs.172572	hypothetical protein FLJ20093	0.37
	444102	AV647953	Hs.282379	ESTs	0.37
40	424122	AA335593	Hs.116147	ESTs	0.37
	452093	AA447453	Hs.27860	Homo sapiens mRNA; cDNA DKFZp586M0723 (f	0.37
	436277	R88520	Hs.120917	ESTs	0.37
	456350	BE246762	Hs.89499	arachidonate 5-lipoxygenase	0.37
	451027	AW519204	Hs.40808	ESTs	0.37
45	426784	U03749	Hs.172216	chromogranin A (parathyroid secretory pr	0.38
	410023	AB017189	Hs.57929	srl (Drosophila) homolog 3	0.38
	436802	N34486	Hs.170504	ESTs	0.38
	448142	AI521768	Hs.164586	ESTs	0.38
	442378	RS4033	Hs.21245	ESTs	0.38
50	446406	AI553681	Hs.25248	ESTs	0.38
	455753	BE075124		gb:PM1-BT0585-110200-003-h02 BT0585 Homo	0.38
	424903	T26477	Hs.22883	ESTs, Weakly similar to ALU8_HUMAN ALU S	0.38
	406714	AJ219304	Hs.283108	hemoglobin, gamma G	0.39
	434340	AI193043	Hs.128685	ESTs	0.39
55	406036				0.39
	431078	U82827	Hs.249195	homeo box A13	0.39
	457663	AW371946	Hs.116119	ESTs	0.39
	451880	AJ821032	Hs.209387	ESTs	0.39
	419219	AW583139	Hs.89717	carboxypeptidase A2 (pancreatic)	0.39
60	446414	W93248	Hs.59187	ESTs	0.39
	442317	AJ915599	Hs.129225	ESTs	0.39
	447261	NM_006691	Hs.17917	lymphatic vessel endothelial hyaluronan	0.39
	439569	AW602166	Hs.222399	CEGP1 protein	0.39
	433485	AJ493076	Hs.78183	aldo-keto reductase family 1, member C1	0.40
65	432753	NM_014075	Hs.278915	PRO0593 protein	0.40
	420200	AI271429	Hs.88142	ESTs	0.40
	421863	AI952677	Hs.108972	Homo sapiens mRNA; cDNA DKFZp434P228 (fr	0.40
	453950	AA156998	Hs.211568	eukaryotic translation initiation factor	0.40
	407408	AF054830		gb:Homo sapiens Interleukin-1 type I rec	0.40
70	410732	AW984328		gb:PM3-HN0010-050400-001-h12 HN0010 Homo	0.40
	458272	AJ797360	Hs.264899	ESTs, Weakly similar to ALU3_HUMAN ALU S	0.40
	401514	AF147188		gb:AF147188 Homo sapiens library (Schere	0.40
	436363	AA843926	Hs.124434	ESTs	0.40
	434445	AI349306	Hs.11782	ESTs	0.40
75	413272	AA127923	Hs.293256	ESTs	0.40
	409681	N51508	Hs.143718	ESTs	0.40
	454554	AW847505		gb:RC0-CT0210-280999-021-c10 CT0210 Homo	0.40
	450891	AJ743118	Hs.238914	ESTs, Weakly similar to neuregulin-4 sho	0.40
	452078	AA022620	Hs.52170	ESTs	0.41
80	419278	AU076799	Hs.1247	apolipoprotein A-IV	0.41
	433637	AW024214	Hs.135405	ESTs	0.41
	449923	BE258051		gb:601111034F1 NIH_MGC_16 Homo sapiens c	0.41
	416982	J05401	Hs.80591	creatine kinase, mitochondrial 2 (sarcom	0.41
	453139	AA330620	Hs.240659	ESTs	0.41
	408614	AL137698	Hs.46531	Homo sapiens mRNA; cDNA DKFZp434C1915 (f	0.41
	437931	AJ249468	Hs.145274	ESTs	0.41
	402759				0.41

	450888	AW021446	Hs.80714	ESTs	0.41
	417318	AW953937	Hs.12891	ESTs	0.41
	407244	M10014	Hs.75431	fibrinogen, gamma polypeptide	0.41
	424884	AW299437	Hs.225717	ESTs	0.41
5	439024	R96696	Hs.35598	ESTs	0.42
	423732	AF058056	Hs.132183	solute carrier family 16 (monocarboxylic	0.42
	409300	AA126190		gb:zm78f03.r1 Stratagene neuroepithelium	0.42
	444237	AA336878	Hs.9842	Human DNA sequence from clone RP4-788L20	0.42
	425660	L29339	Hs.1964	solute carrier family 5 (sodium/glucose	0.42
10	447021	AI356564	Hs.161406	ESTs	0.42
	422270	AF114494	Hs.114062	protein tyrosine phosphatase-like (proli	0.42
	407850	AW086230	Hs.244912	ESTs	0.42
	448684	AI673110	Hs.222195	ESTs	0.42
	436327	AA813075	Hs.120181	ESTs	0.42
15	415972	H11438	Hs.260201	ESTs	0.42
	400917			ESTs	0.43
	435309	AW089050	Hs.187993	ESTs	0.43
	424410	W79027	Hs.271762	ESTs	0.43
	445577	N40696	Hs.146077	ESTs	0.43
20	411069	AL133092	Hs.68055	hypothetical protein DKFZp434I0428	0.43
	440286	U29589	Hs.7138	cholinergic receptor, muscarinic 3	0.43
	451123	A927224	Hs.213480	ESTs	0.43
	457151	AW208116	Hs.253538	ESTs	0.43
	459185	AI909222		gb:RC-BT165-300399-020 BT165 Homo sapien	0.43
25	411607	AW853498		gb:RC1-CT0252-170200-025-h02 CT0252 Homo	0.43
	424815	AA347287	Hs.104573	ESTs	0.43
	429704	AA584440	Hs.185812	ESTs	0.43
	411067	AI681006	Hs.301543	ESTs	0.43
	430172	AA468591	Hs.161889	ESTs	0.43
30	435124	AA725362	Hs.120456	ESTs	0.43
	445966	L17330	Hs.280	pre-T/NK cell associated protein	0.43
	443741	AW451759	Hs.145420	ESTs	0.43
	416275	H42823	Hs.155742	glyoxylate reductase/hydroxypyruvate red	0.44
35	451138	W92287	Hs.40268	ESTs	0.44
	409038	T97490	Hs.50002	small inducible cytokine subfamily A (Cy	0.44
	426730	AL040738		gb:DKFZp434B1615_r1 434 (synonym: htes3)	0.44
	410066	AL117664	Hs.58419	DKFZP586L2024 protein	0.44
	427965	D00306	Hs.183864	elastase 3B	0.44
	418026	BE379727	Hs.83213	fatty acid binding protein 4, adipocyte	0.44
40	408479	BE047329	Hs.144483	ESTs	0.44
	457994	AW136239	Hs.132922	ESTs	0.44
	435564	AF210652	Hs.16614	5(3)-deoxyribonucleotidase (dNT-2); nucl	0.45
	435869	AF255910	Hs.54650	vascular endothelial junction-associated	0.45
45	434399	AA878845	Hs.125769	ESTs	0.45
	415797	AI291896	Hs.72800	ESTs	0.45
	430264	AA470519		gb:nc71110.s1 NCI_CGAP_Py1 Homo sapiens	0.45
	409435	AI810721	Hs.95424	ESTs	0.45
	433542	AA598869	Hs.173770	ESTs	0.45
50	455400	AW936342		gb:OV4-DT0021-281299-070-h12 DT0021 Homo	0.45
	412047	AA934589	Hs.49696	ESTs	0.45
	443948	T56148	Hs.9597	Homo sapiens mRNA full length insert cDN	0.45
	450307	AW450336	Hs.201783	ESTs	0.45
	434500	AF143877	Hs.215047	Homo sapiens clone IMAGE:113431 mRNA seq	0.45
55	420460	AA262331	Hs.135503	ESTs	0.45
	450752	AA012986	Hs.60466	ESTs	0.45
	418138	AA213626	Hs.136204	EST	0.45
	441088	AA918546	Hs.126546	ESTs	0.46
	410990	AW812929		gb:RC3-ST0186-250200-018-c05 ST0186 Homo	0.46
60	438211	T08401		gb:EST06292 Infant Brain, Bento Soares H	0.46
	434349	NM_015678	Hs.3821	neurobeachin	0.46
	409824	AW501063		gb:U1-HF-BPOp-ai2-c-01-Q-U1.r1 NIH_MGC_5	0.46
	403279				0.46
	434882	AW974752	Hs.269497	ESTs	0.46
65	404629				0.46
	427393	AB029018	Hs.177635	KIAA1095 protein	0.46
	454651	AW812091		gb:RC4-ST0173-191099-032-b04 ST0173 Homo	0.46
	401992				0.46
	457275	AA463422	Hs.209431	ESTs	0.46
70	403710				0.46
	419728	L36861	Hs.92858	guanylate cyclase activator 1A (retina)	0.46
	401075				0.46
	421387	AF059566	Hs.103983	solute carrier family 5 (sodium iodide s	0.46
	453404	AA035446	Hs.261224	ESTs	0.46
75	407208	T10695	Hs.102948	enigma (LIM domain protein)	0.46
	440681	AW449696	Hs.166547	ESTs	0.46
	454206	AW810279		gb:MR4-ST0125-151299-029-g09 ST0125 Homo	0.47
	402466				0.47
	429995	N90822	Hs.48969	ESTs	0.47
80	403680				0.47
	428151	AA422028		gb:zv26g06.r1 Soares_NhHMPu_S1 Homo sapi	0.47
	410495	N95428		gb:zb80d09.s1 Soares_senescent_fibroblasts	0.47
	402851				0.47
	438421	AA806907	Hs.194451	ESTs	0.47

5	454661	BE244138		gb:TCBAP1E1218 Pediatric pre-B cell acut	0.47
	408753	AI337192	Hs.47438	SH3 domain binding glutamic acid-rich pr	0.47
	409106	AW337854	Hs.177385	ESTs	0.47
	413199	M62843	Hs.75236	ELAV (embryonic lethal, abnormal vision,	0.47
	442799	AI584739	Hs.68505	ESTs	0.47
	457955	AI208988	Hs.143945	ESTs	0.47
	458147	AW752597		gb:DL3-CT0214-161299-045-806 CT0214 Homo	0.47
	407938	AA905097	Hs.85050	phospholamban	0.47
10	414141	BE255083		gb:G01111390F1 NIH_MGC_16 Homo sapiens c	0.47
	448869	AI792798	Hs.12496	ESTs	0.47
	400749			ESTs	0.47
	458745	AW207347	Hs.211101	ESTs	0.48
	418437	AA771738	Hs.295351	ESTs	0.48
	452285	AI358570	Hs.123933	ESTs	0.48
15	430369	AA477631	Hs.119484	ESTs	0.48
	453572	AA382590	Hs.31848	ESTs, Weakly similar to hypothetical pro	0.48
	455175	AW993247		gb:RC2-BN0033-180200-014-h09 BN0033 Homo	0.48
	445765	AV555102	Hs.117266	ESTs	0.48
20	400322	AF045576	Hs.247758	olfactory receptor, family 5, subfamily	0.48
	412526	M90366	Hs.73982	zona pellucida glycoprotein 2 (sperm rec	0.48
	407986	U32659	Hs.41724	Interleukin 17 (cytotoxic T-lymphocyte-a	0.48
	455479	AW948312		gb:RC0-MT0015-280300-021-h04 MT0015 Homo	0.48
	450308	AI692571	Hs.201681	ESTs	0.48
	411149	N88715	Hs.269128	ESTs	0.48
25	453982	AW014252	Hs.252637	ESTs	0.48
	410971	AW812258		gb:RC0-ST0174-191099-031-b02 ST0174 Homo	0.48
	410839	NM_006849	Hs.66581	protein disulfide isomerase	0.48
	421553	AA536080	Hs.97302	ESTs	0.48
30	442376	W95588	Hs.129982	Homo sapiens cDNA FLJ12228 fs, clone MA	0.48
	454754	AW819191		gb:CM1-ST0283-071299-061-d08 ST0283 Homo	0.48
	447858	AW080339	Hs.211911	ESTs	0.49
	422639	AI929377	Hs.173724	creatine kinase, brain	0.49
	402449			ESTs	0.49
35	420440	NM_002407	Hs.97644	mammaglobin 2	0.49
	435056	AW023337	Hs.5422	glycoprotein M68	0.49
	419543	AA244170	Hs.188719	ESTs	0.49
	407033	U78628		gb:Human leukemia inhibitory factor rece	0.49
	437468	AA457619		gb:aa89d11.r1 Stratagene fetal retina 93	0.49
40	412639	AW961284	Hs.296235	ESTs	0.49
	406109			ESTs	0.49
	404519			ESTs	0.49
	410285	AA083609		gb:zm63d05.r1 Stratagene fibroblast (937	0.49
	406014			ESTs	0.49
45	400938			ESTs	0.49
	414290	AI568801	Hs.71721	ESTs	0.49
	432433	AW014734	Hs.157969	ESTs	0.49
	405273			ESTs	0.49
	454738	BE072139		gb:PM1-BT0533-291299-002-b05 BT0533 Homo	0.49
50	414383	BE279406		gb:G01157981F1 NIH_MGC_21 Homo sapiens c	0.49
	445911	AI985987	Hs.145645	ESTs, Moderately similar to ALU1_HUMAN A	0.49
	451241	AI767545	Hs.209572	ESTs	0.49
	428336	AA503115	Hs.183752	microseminoprotein, beta-	0.49
	418310	AA814100	Hs.86693	ESTs	0.49
55	452152	AL046755	Hs.28219	protein phosphatase 2 (formerly 2A), reg	0.49
	454869	AW836004		gb:PM0-LT0019-170200-001-d11 LT0019 Homo	0.49
	400332	S66407	Hs.248032	FLT4	0.49
	425280	U31519	Hs.1872	phosphoenolpyruvate carboxykinase 1 (sol	0.49
	408221	AA912183	Hs.47447	ESTs	0.49
60	440179	AI990151	Hs.125904	ESTs	0.50
	425360	BE547704		gb:G01076309F1 NIH_MGC_12 Homo sapiens c	0.50
	406600			ESTs	0.50
	418594	AI732083	Hs.187619	ESTs	0.50
	432128	AA127221	Hs.117037	ESTs	0.50
	458611	AI268407	Hs.211458	ESTs	0.50
65	426495	NM_001151	Hs.2043	solute carrier family 25 (mitochondrial	0.50
	441068	AA913897	Hs.233559	ESTs	0.50
	428108	AA421452	Hs.164851	ESTs	0.50
	400803			ESTs	0.50
70	439996	AA916565	Hs.221675	ESTs	0.50

TABLE 44B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

75	Pkey	CAT number	Accession
	409300	111676_1	AA126190 AA074486 AA074707 AA070059 AA084885
	409824	1155499_1	AW501063 AW503034 AW501523
80	410285	119128_1	AA083609 AA083790 AA112048
	410495	1205826_1	N95428 WZ4040 AW751366 H81987
	410732	1218556_1	AW984328 AW984322 AW984318 AW984330 R58427 AW984332 AW799807 AW984321
	410971	1228216_1	AW812258 AW812252 AW812261 AW812263 AW812285 AW812277 AW812264
	410990	1228649_1	AW812929 AW812779 AW813088

	411607	1251251_1	AW853498 AW853442 AW853590 AW853433 AW853592
	413079	1348528_1	BE064382 BE064387 BE064385 BE064381 BE153367 BE153366 BE153401 BE153385 BE064372
	413679	1382784_1	BE156765 BE156770 BE156767 BE156769 BE156803 BE156802 BE156847 BE156853 BE156780 BE156836 BE156792 BE156834 BE156779
5	414141	1420715_1	BE156789 BE156833 BE156844 BE156831 BE156849 BE156797 BE156784 BE156801 BE156843 BE156793 BE156852
	414383	1440279_1	BE255083 BE257634
	422582	218132_1	BE279406 BE280100
	425360	250631_1	AA312660 AA474863
10	426730	271055_1	BE547704 AA355909
	428151	287658_1	AL040738 AA383683
	430264	315008_1	AA422028 W79191
	430664	321423_1	AA470519 BE303010 BE302954 BE384120
	431152	328675_1	AW969834 AA528493 AA483165 AW969842
15	431514	334213_1	AW970998 AW971004 AA574217 AA493538
	437468	43743_1	AW972363 AA506335 A077445
	438211	45225_1	AA457619 AL390167
	449923	81926_1	T08401 Z83934 T16897
	451818	887271_1	BE258051 R45758 AA004732 BE255126
20	454206	1050848_1	AJ819018 R05492 W27615
			AW810279 BE146684 BE146693 BE146694 BE146679 AW810472 AW810208 AW810356 AW810193 AW178838 AW178837 AW178857 AW810515
			AW810330 AW810514 AW810441 AW810358 AW178852 AW810359 AW810322 AW810327 AW810211 AW178835 AW810635 AW810288 AW810263
			AW810325 AW810443 AW810198 AW810321 AW810265 AW810567 AW810447 AW810328 AW810513 BE146674 AW810257 AW810185 AW810281
			AW810258 BE062400 AW810323 AW810293 BE146652 AW810516 BE146689 AW810289 AW810566 AW810636 AW178842 BE062434 BE146653
			AW810536 AW846649
25	454554	1223842_1	AW847505 AW811792 BE061442 BE061433 AW847506 AW806999 AW806996 BE061436 BE061430 BE142460 BE146499 AW806994 AW809156
			AW806991 AW814082 AW806992 BE061669 AW807002 BE146659 AW806995 AW807000 AW845743 AW845747 AW847504 BE142458 BE061431
			BE061435 AW847507 BE146650 BE142470 AW814096 AW807012 BE061438 AW807011 AW806993 BE142465 BE142459 BE142462 AW854330
			AW854331 BE061434 BE061731 BE142464 AW847501 AW807001 BE142463 AW811800 BE061437 AW811802 BE061440 AW806997 AW806998
			BE061745 BE061753
30	454560	1223940_1	AW807281 AW807092 AW807425 AW807330 AW807174 AW807171 AW807274 AW807278 AW807367
	454651	1228069_1	AW812091 AW812228 AW812106 AW938581 AW812080
	454661	1228527_1	BE244138 BE244727 AW812636 AW812647
	454738	1232449_1	BE072139 BE157977 BE157974 AW857974 AW817778
	454754	1233580_1	AW819191 AW819252 AW819183 AW819175 AW819177 AW819186 AW819180 BE158470 AW819242 AW819269 AW819244 AW819190 AW819265
35	454790	1234752_1	AW819268 AW819246 BE152602 AW819249 AW819251 AW819263 AW819194
	454869	1238137_1	AW820852 AW820773 AW821088
			AW836004 AW836087 AW836163 AW836162 AW836085 AW836084 AW836079 AW836083 AW836082 AW836086 AW836088 AW836166 AW836164
			AW836002 AW836078 AW836161 AW862135 AW836165 AW836003
	455175	1257335_1	AW993247 AW861464
40	455400	1288135_1	AW936342 AW936368
	455479	1293163_1	AW948312 AW948286 AW948289 AW948297 AW948279 AW948295
	455541	1323705_1	AW993005 AW993285 AW993290
	455753	1356070_1	BE075124 BE075229 BE075278
	455826	1373392_1	BE144228 BE144291
45	458147	488021_1	AW752597 AW848781 AW849062 AW848490 AW752699 AW752604 AW752700
	459185	922823_1	AJ908222 AJ908224 AJ908217

TABLE 44C:

Pkey:	Unique number corresponding to an Eos probe set
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NI_position:	Indicates nucleotide positions of predicted exons.

55	Pkey	Ref	Strand	NI_position
	400749	7331445	Minus	9162-9293
	400803	8567875	Minus	18267-19088
	400917	7283186	Minus	173258-173631
	400938	7652890	Minus	92074-92423
60	401075	3687273	Plus	81218-81395
	401514	7622355	Plus	93224-93292, 94913-95065, 95163-95334
	401775	9966311	Minus	110228-110340
	401989	4309964	Minus	118611-118821
	401992	4153858	Plus	31432-31649
65	402015	7417802	Minus	48791-49043, 50038-50205, 51530-51672, 54448-54565, 55933-56073
	402449	9796674	Plus	59867-60039, 62588-62828, 63465-63623, 64923-65108
	402466	9796919	Plus	57659-57866, 58839-58908
	402759	9213869	Plus	134117-134281
	402760	9213869	Plus	136829-136952, 137336-137521
70	402851	9650753	Minus	63022-63136, 63683-63783
	403059	8954192	Minus	69553-69702
	403279	8072597	Plus	162569-162768, 163918-164168
	403429	9719566	Minus	52789-52917
	403670	7259739	Minus	88377-88537
75	403680	7331517	Minus	157184-157415
	403710	6437516	Plus	27413-28978
	404121	9796219	Plus	59256-59401
	404519	8152000	Plus	12817-13000
	404629	9796665	Plus	55584-55796
80	404973	3213020	Plus	101602-102591
	405110	8096888	Minus	118940-119100
	405273	4156137	Minus	98141-98754
	405645	4926864	Minus	92231-92380, 92724-92869
	405742	7283744	Minus	54424-55488

405817	4071056	Plus	19914-20112,25655-25810
406014	6758904	Minus	23738-24076
406035	6758919	Plus	17942-18163
406109	9127147	Minus	58328-58485
406255	7417729	Plus	2959-3200
406326	9212385	Plus	84508-84655
406600	8248616	Minus	36296-36610

# 10 TABLE 45A: ABOUT 947 GENES UP-REGULATED IN STOMACH CANCER COMPARED TO NORMAL ADULT TISSUES

Table 45A lists about 947 genes up-regulated in stomach cancer compared to normal adult tissues. These were selected from 59680 probesets on the Affymetrix/Eos Hs03 GeneChip array such that the ratio of "average" stomach cancer to "average" normal adult tissues was greater than or equal to 2.5. The "average" stomach cancer level was set to the 90th percentile amongst various stomach cancers. The "average" normal adult tissue level was set to the 90th percentile amongst various non-malignant tissues. In order to remove gene-specific background levels of non-specific hybridization, the 15th percentile value amongst various non-malignant tissues was subtracted from both the numerator and the denominator before the ratio was evaluated.

15 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 20 R1: Ratio of stomach cancer compared to normal stomach

Pkey	ExAccn	UnigeneID	Unigene Title	R1
418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial)	66.80
411243	AB039886	Hs.69319	CA11	61.16
428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin)	42.36
427565	D31152	Hs.179729	collagen, type X, alpha 1 (Schmid metaph	35.80
425679	X05997	Hs.159177	lipase, gastric	28.34
409041	AB033025	Hs.50081	KIAA1199 protein	26.91
452121	NM_004081	Hs.70936	deleted in azoospermia	26.22
403776			NA	25.00
444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	23.90
422956	BE545072	Hs.122579	hypothetical protein FLJ10461	23.90
409187	AF154830	Hs.50966	carbamoyl-phosphate synthetase 1, mitoch	23.35
424252	AK000520	Hs.143811	hypothetical protein FLJ20513	22.26
439759	AL359055	Hs.67709	Homo sapiens mRNA full length insert cDN	21.06
415989	AI267700	Hs.317584	ESTs	20.72
416209	AA236776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	19.84
452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	15.50
438639	AI278360	Hs.31409	ESTs	15.16
426427	M86699	Hs.169840	TTK protein kinase	14.54
449032	AA045573	Hs.22900	nuclear factor (erythroid-derived 2)-lik	14.26
443211	AI128388	Hs.143655	ESTs	14.22
421470	R27496	Hs.1378	annexin A3	13.96
400792	AA635062	Hs.50094	Homo sapiens mRNA; cDNA DKFp434O0515 (	13.94
424085	AI351010	Hs.102267	lysyl oxidase	13.73
437789	AI581344	Hs.127812	ESTs, Weakly similar to T17330 hypotheti	13.38
409757	NM_001898	Hs.123114	cystatin SN	13.33
447033	AI357412	Hs.157601	ESTs	13.20
447164	AF026941	Hs.17518	Homo sapiens c1g5 mRNA, partial sequence	12.80
420159	AI572490	Hs.99785	Homo sapiens cDNA: FLJ21245 fs, clone C	12.66
432596	AI224741	Hs.278461	matrilin 3	12.64
424905	NM_002497	Hs.153704	NIMA (never in mitosis gene a)-related k	12.46
413582	AW295647	Hs.71331	hypothetical protein MGCS350	12.32
423020	AA383092	Hs.1608	replication protein A3 (14kD)	12.18
448693	AW004854	Hs.228320	hypothetical protein FLJ23537	11.74
442660	AW138174	Hs.130651	ESTs	11.73
441693	AA384673	Hs.7943	RPB5-mediated protein	11.16
450221	AA328102	Hs.24641	cytoskeleton associated protein 2	11.08
414142	AW368397	Hs.150042	Homo sapiens cDNA FLJ14438 fs, clone HE	10.90
424717	H03754	Hs.152213	wingless-type MMTV integration site fami	10.48
443715	AI583187	Hs.9700	cyclin E1	10.44
420900	AL045633	Hs.44269	ESTs	10.38
453922	AF053306	Hs.36708	budding uninhibited by benzimidazoles 1	10.36
415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	10.20
452291	AF015592	Hs.28853	CDC7 (cell division cycle 7, S. cerevisi	10.18
410566	AA373210	Hs.43047	Homo sapiens cDNA FLJ13585 fs, clone PL	10.14
414422	AA147224	Hs.337232	ESTs	10.12
409269	AA576953	Hs.22972	hypothetical protein FLJ13352	10.02
414972	BE263782	Hs.77695	KIAA008 gene product	10.02
418882	NM_004996	Hs.89433	ATP-binding cassette, sub-family C (CFTR	9.80
428365	AA295331	Hs.183861	Homo sapiens cDNA FLJ20042 fs, clone CO	9.72
416661	AA634543	Hs.79440	IGF-II mRNA-binding protein 3	9.68
400195	NA		NA	9.66
418738	AW388633	Hs.6682	solute carrier family 7, (cationic, amino	9.64
420170	U43374	Hs.95631	Human normal keratinocyte mRNA	9.60
414259	W44633	Hs.301296	Homo sapiens cDNA: FLJ23131 fs, clone L	9.58
417517	AF001176	Hs.82238	POP4 (processing of precursor, S. cerev	9.34
446998	N99013	Hs.16762	Homo sapiens mRNA; cDNA DKFp56482062 (	9.26
429486	AF155827	Hs.203963	hypothetical protein FLJ10339	9.16
428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	8.95
431810	X67155	Hs.270845	kinesin-like 5 (mitotic kinesin-like pro	8.84
419261	X07876	Hs.89791	wingless-type MMTV integration site fami	8.80
425921	NM_007231	Hs.162211	solute carrier family 6 (neurotransmitte	8.78

	424834	AK001432	Hs.153408	Homo sapiens cDNA FLJ10570 fs, clone NT	8.69
	413268	AL039079	Hs.75256	regulator of G-protein signaling 1	8.68
	417801	AA417383	Hs.82582	integrin, beta-like 1 (with EGF-like rep	8.68
	452461	N78223	Hs.108106	transcription factor	8.68
5	425916	NM_006786	Hs.162200	urotensin 2	8.64
	422805	AA435989	Hs.121017	H2A histone family, member A	8.54
	438394	BE379623	Hs.27693	peptidylprolyl isomerase (cyclophilin)-I	8.52
	441377	BE218239	Hs.202656	ESTs	8.41
	445891	AW391342	Hs.199460	ESTs	8.31
10	408771	AW732573	Hs.47584	potassium voltage-gated channel, delayed	8.30
	439521	AI808955	Hs.58248	ESTs	8.30
	425087	R62424	Hs.126059	ESTs	8.28
	424653	AW977534	Hs.151469	calcium/calmodulin-dependent serine prot	8.22
	441795	N58115	Hs.21137	AD024 protein	8.02
15	427878	C05766	Hs.181022	CGI-07 protein	8.00
	413583	AL120806	Hs.5888	ESTs	7.98
	407853	AA336797	Hs.40499	clckopf (Xenopus laevis) homolog 1	7.98
	426269	H15302	Hs.168950	Homo sapiens mRNA; cDNA DKFZp566A1046 (f	7.97
	404996			NA	7.96
20	400289	X07820	Hs.2258	matrix metalloproteinase 10 (stromelysin	7.96
	410044	BE566742	Hs.58169	highly expressed in cancer, rich in leuc	7.94
	417655	AA780791	Hs.14014	hypothetical protein FLJ14813	7.92
	452638	U65011	Hs.30743	preferentially expressed antigen in meta	7.91
	418895	AA894638	Hs.14600	ESTs	7.90
25	446155	AI563695	Hs.159422	Homo sapiens cDNA FLJ13997 fs, clone Y7	7.88
	423123	NM_012247	Hs.124027	SELENOPHOSPHATE SYNTHETASE; Human selen	7.82
	434539	AW748078	Hs.214410	ESTs, Weakly similar to MUC2_HUMAN MUCIN	7.80
	447505	AL049266	Hs.18724	Homo sapiens mRNA; cDNA DKFZp564F093 (tr	7.72
	418763	AK000219	Hs.88367	hypothetical protein FLJ20212	7.70
30	447289	AW247017	Hs.36978	melanoma antigen, family A, 3	7.70
	443354	AW970672	Hs.9247	protein kinase, AMP-activated, alpha 1 c	7.69
	427718	AI798680	Hs.25933	ESTs	7.66
	434032	AW009951	Hs.206892	ESTs	7.60
35	427738	NM_000318	Hs.180612	peroxisomal membrane protein 3 (35kD, Ze	7.58
	450480	X82125	Hs.25040	zinc finger protein 239	7.51
	418678	NM_001327	Hs.167379	cancer/testis antigen	7.49
	431494	AA591355	Hs.298312	hypothetical protein DKFZp434A1315	7.44
	452705	H49805	Hs.246005	ESTs	7.36
	443846	AI085198	Hs.164226	ESTs	7.32
40	425420	BE536911	Hs.234545	hypothetical protein NUF2R	7.30
	420617	AK001652	Hs.99423	ATP-dependent RNA helicase	7.28
	421155	H87879	Hs.102267	lysyl oxidase	7.24
	450715	AI266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	7.24
	447254	NM_004153	Hs.17908	origin recognition complex, subunit 1 (y	7.22
45	435473	N53550	Hs.260881	ESTs	7.20
	413293	AL047483	Hs.302498	GTP-binding protein homologous to Saccha	7.14
	449347	AV649748	Hs.295901	KIAA0493 protein	7.11
	452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fs, clone PL	7.11
50	408908	BE296227	Hs.250822	serine/threonine kinase 15	7.11
	408660	AA525775	Hs.292523	ESTs, Moderately similar to PC4259 ferri	7.10
	453688	AW381270	Hs.194110	hypothetical protein PRO2730	7.02
	426890	AA393167	Hs.41294	ESTs	6.98
	404440			NA	6.97
55	426642	AW068223	Hs.171581	ubiquitin C-terminal hydrolase UCH37	6.96
	431723	AW058350	Hs.16762	Homo sapiens mRNA; cDNA DKFZp564B2062 (f	6.95
	413833	Z15005	Hs.75573	centromere protein E (312kD)	6.94
	426249	F05422	Hs.168352	nucleoporin-like protein 1	6.94
	441421	AA356792	Hs.334824	hypothetical protein FLJ14825	6.92
60	400298	AA032279	Hs.61635	six transmembrane epithelial antigen of	6.85
	423903	M57785	Hs.1721	interleukin 11	6.84
	431041	AA490987	Hs.197955	KIAA0704 protein	6.74
	417256	U94332	Hs.81791	tumor necrosis factor receptor superfam	6.74
	426921	AA037145	Hs.172865	cleavage stimulation factor, 3' pre-RNA,	6.70
	407771	AL138272	Hs.62713	ESTs	6.69
65	433393	AF038564	Hs.98074	itchy (mouse homolog) E3 ubiquitin prote	6.66
	407162	N63855	Hs.142634	zinc finger protein	6.64
	411343	U77949	Hs.69563	CDC6 (cell division cycle 6, S. cerevisi	6.64
	427920	Z11502	Hs.181107	annexin A13	6.59
70	450159	AI702416	Hs.200771	ESTs, Moderately similar to A Chain A, T	6.58
	427401	U20582	Hs.2149	actin like protein	6.55
	447102	BE167434	Hs.98471	ESTs, Weakly similar to T18712 hypotheti	6.54
	431806	AF186114	Hs.270737	tumor necrosis factor (ligand) superfam	6.54
	435159	AA668879	Hs.116649	ESTs	6.54
75	440209	H05049	Hs.22269	neurexin 3	6.54
	418134	AA397769	Hs.86617	ESTs	6.50
	451807	W52854	Hs.27099	hypothetical protein FLJ23293 similar to	6.47
	434894	AW977850	Hs.23856	hypothetical protein MGCS297	6.40
	422505	AL120862	Hs.124165	ESTs	6.34
80	426010	AA136563	Hs.1975	hypothetical protein FLJ21007	6.32
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	6.31
	408380	AF123050	Hs.44532	ubiquitin	6.31
	420218	AW958037	Hs.286	ribosomal protein L4	6.29
	405817	NA		NA	6.28

5	406747	AI925153	Hs.217493	annexin A2	6.24
	448743	AB032862	Hs.21896	KIAA1138 protein	6.24
	434636	AA083764	Hs.6101	hypothetical protein MGC3178	6.20
	424602	AK002055	Hs.151046	hypothetical protein FLJ11193	6.17
	412661	N32860	Hs.24611	ESTs, Weakly similar to I54374 gene NF2	6.17
	401644			NA	6.16
	423248	AA380177	Hs.125845	ribose-5-phosphate-3-epimerase	6.13
	427335	AA448542	Hs.251677	G antigen 7B	6.12
10	450375	AA009647	Hs.8850	a disintegrin and metalloproteinase domain	6.07
	422420	U03398	Hs.1524	tumor necrosis factor (ligand) superfamily	6.06
	419752	AA249673	Hs.152618	ESTs, Moderately similar to ZN91_HUMAN 2	6.06
	413573	AI733859	Hs.149089	ESTs	6.06
	408758	NM_003686	Hs.47504	exonuclease 1	6.02
15	444188	AI393165	Hs.699	peptidylprolyl isomerase B (cyclophilin)	6.02
	407746	AK001962	Hs.38114	hypothetical protein FLJ111100	6.00
	446364	AB006624	Hs.14912	KIAA0286 protein	5.98
	418939	AW630803	Hs.89497	lamin B1	5.90
	424639	AI917494	Hs.9812	Homo sapiens cDNA FLJ14388 fls, clone HE	5.88
20	434377	AW137148	Hs.306593	Homo sapiens cDNA FLJ11382 fls, clone HE	5.86
	419863	AW952691	Hs.93485	Homo sapiens mRNA; cDNA DKFZp761D191 (fr	5.84
	430849	AF940727	Hs.270556	ESTs, Highly similar to AF156779 1 ASB-4	5.82
	428822	W28418	Hs.30715	potassium voltage-gated channel, Isk-rel	5.80
	448776	BE302464	Hs.30057	MRS2 (S. cerevisiae)-like, magnesium hom	5.74
25	442957	AI949952	Hs.49397	ESTs	5.72
	444577	AI207721	Hs.11393	RAO51 (S. cerevisiae) homolog C	5.72
	424565	AW102723	Hs.75295	guanylate cyclase 1, soluble, alpha 3	5.71
	433330	AW207084	Hs.132816	hypothetical protein MGC14801	5.68
	428618	AA885360	Hs.160199	NADPH oxidase, EF hand calcium-binding d	5.68
30	432867	AW016936	Hs.233364	ESTs	5.64
	412140	AA219691	Hs.73625	RAB6 Interacting, kinesin-like (rabkines	5.63
	433133	AB027249	Hs.104741	PDZ-binding kinase; T-cell originated pr	5.62
	418379	AA218940	Hs.137516	edgefin-like 1	5.57
	434551	BE387162	Hs.280858	ESTs, Highly similar to A35661 DNA excis	5.57
35	442353	BE378594	Hs.49136	ESTs, Moderately similar to ALU7_HUMAN A	5.56
	427386	AW836261	Hs.337717	ESTs	5.54
	425650	NM_001944	Hs.1925	desmoglein 3 (pemphigus vulgaris antigen	5.52
	428479	Y00272	Hs.184572	cell division cycle 2, G1 to S and G2 to	5.51
	449370	AK002114	Hs.23495	hypothetical protein FLJ11252	5.50
40	431118	BE264901	Hs.250502	carbonic anhydrase VIII	5.50
	423673	BE003054	Hs.1695	matrix metalloproteinase 12 (macrophage	5.50
	453931	AL121278	Hs.25144	ESTs	5.49
	409044	AI129586	Hs.33033	hypothetical protein FLJ14623	5.48
	436291	BE568452	Hs.5101	protein regulator of cytokinesis 1	5.45
45	448336	R53848	Hs.44976	ESTs	5.44
	454018	AW016892	Hs.100855	ESTs	5.42
	457030	AI301740	Hs.173381	dihydropyrimidinase-like 2	5.42
	412246	AI180873	Hs.69233	zinc finger protein	5.40
	432193	AA372264	Hs.273193	hypothetical protein FLJ10706	5.40
50	437319	BE410958	Hs.56406	Homo sapiens cDNA FLJ13549 fls, clone PL	5.40
	427660	AI741320	Hs.114121	Homo sapiens cDNA: FLJ23228 fls, clone C	5.40
	452862	AW378065	Hs.8687	ESTs	5.38
	409327	L41162	Hs.53563	collagen, type IX, alpha 3	5.36
	412811	H06382	Hs.21400	ESTs	5.34
55	448390	AL035414	Hs.21068	hypothetical protein	5.32
	428187	AI687303	Hs.285529	G protein-coupled receptor 49	5.30
	450434	AA166950	Hs.195870	hypothetical protein FLJ14991	5.29
	434265	AA846811	Hs.130554	Homo sapiens cDNA: FLJ23089 fls, clone L	5.28
	407811	AW190902	Hs.40098	cysteine knot superfamily 1, BMP antagon	5.27
60	446638	AL133063	Hs.15783	Homo sapiens mRNA: cDNA DKFZp434P1115 (f	5.26
	444743	AA045648	Hs.301957	nucleoside diphosphate linked mol	5.25
	424902	NM_003866	Hs.153887	inositol polyphosphate-4-phosphatase, ty	5.24
	452150	W42490	Hs.260844	ESTs	5.24
	432865	AI753709	Hs.152484	ESTs, Weakly similar to I38022 hypotheti	5.24
65	453382	AA709285	Hs.5997	hypothetical protein FLJ13078	5.22
	447048	AW393080	Hs.228320	hypothetical protein FLJ23537	5.22
	426518	Z43039	Hs.170198	KIAA0009 gene product	5.22
	453884	AA355925	Hs.36232	KIAA0186 gene product	5.20
	429625	AA455568	Hs.193814	ESTs	5.20
70	413472	BE242870	Hs.75379	solute carrier family 1 (glial high aff	5.20
	449318	AW236021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	5.19
	444059	R69743	Hs.116774	integrin, alpha 1	5.18
	409432	D49372	Hs.54460	small inducible cytokine subfamily A (Cy	5.17
	412719	AW016610	Hs.129911	ESTs	5.15
75	444342	NM_014398	Hs.10887	similar to lysosome-associated membrane	5.14
	425739	T19016	Hs.159410	molybdopterin synthase sulfurylase	5.12
	452198	AI097560	Hs.61210	ESTs, Weakly similar to I38022 hypotheti	5.12
	445657	AW612141	Hs.279575	Homo sapiens G-protein coupled receptor	5.10
	434699	AA643687	Hs.149425	Homo sapiens cDNA FLJ11980 fls, clone HE	5.09
80	424296	AI631874	Hs.155140	casein kinase 2, alpha 1 polypeptide	5.08
	441845	AI222279	Hs.201555	ESTs, Weakly similar to T23406 hypotheti	5.06
	412723	AA648459	Hs.335951	hypothetical protein AF301222	5.06
	448811	AI590371	Hs.174759	ESTs	5.05
	447342	AI199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	5.04

5	411835	U29343	Hs.72550	hyaluronan-mediated mobility receptor (R	5.04
	421373	AA808229	Hs.167771	ESTs	5.04
	448991	AW771565	Hs.189594	ESTs	5.02
	429370	C19097	Hs.89709	glutamate-cysteine ligase, modifier subu	5.00
	454036	AA374756	Hs.93560	Homo sapiens mRNA for KIAA1771 protein,	4.88
	405770			NA	4.96
	421110	AJ250717	Hs.1355	cathepsin E	4.96
	452588	AA889120	Hs.110637	homeo box A10	4.92
10	433159	AB035898	Hs.150587	kinesin-like protein 2	4.91
	420952	AA282067	Hs.88972	ESTs, Moderately similar to A46010 X-fin	4.88
	408321	AW405882	Hs.44205	cortistatin	4.87
	441801	AW242799	Hs.86366	ESTs	4.84
	450568	AL050078	Hs.25159	Homo sapiens cDNA FLJ10784 fs, clone NT	4.83
15	452909	NM_015368	Hs.30985	pannexin 1	4.82
	409799	D11928	Hs.76845	phosphoserine phosphatase-like	4.82
	451105	A1761324		gb:wi50b11.x1 NCI_CGAP_Co16 Homo sapiens	4.80
	417168	AL133117	Hs.81376	Homo sapiens mRNA; cDNA DKFZp586L1121 (f	4.80
	418203	X54942	Hs.83758	CDC28 protein kinase 2	4.80
20	418994	AA296520	Hs.89546	selectin E (endothelial adhesion molecuol	4.78
	436982	AB018305	Hs.5378	spondin 1, (f-spondin) extracellular mat	4.78
	432874	W94322	Hs.279651	melanoma inhibitory activity	4.78
	440351	AF030933	Hs.7179	RAD1 (S. pombe) homolog	4.78
	431956	AK002032	Hs.272245	Homo sapiens cDNA FLJ11170 fs, clone PL	4.77
25	442980	AA857025	Hs.8878	kinesin-like 1	4.76
	432437	W07088	Hs.293685	ESTs	4.76
	414869	AA157291	Hs.21479	ubiquitin 1	4.74
	446254	BE179829	Hs.179852	Homo sapiens cDNA FLJ12832 fs, clone NT	4.74
30	418380	AA425473	Hs.84429	KIAA0971 protein	4.74
	419343	AA456245	Hs.85603	down-regulated by Ctnnb1, a	4.74
	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	4.72
	425813	AA384136	Hs.210553	hypothetical protein DKFZp7611172	4.71
	425071	NM_013989	Hs.154424	deiodinase, iodothyronine, type II	4.71
	412733	AA984472	Hs.74554	KIAA0080 protein	4.68
35	444325	AW152618	Hs.16757	ESTs	4.66
	407638	AJ404672	Hs.334483	hypothetical protein FLJ23571	4.66
	430345	AK000282	Hs.239681	hypothetical protein FLJ20275	4.66
	428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	4.64
	449448	D60730	Hs.57471	ESTs	4.62
40	409732	NM_016122	Hs.58148	NY-REN-58 antigen	4.62
	432415	T16971	Hs.289014	ESTs, Weakly similar to A43932 mucin 2 p	4.62
	421887	A1133161	Hs.286131	CGI-101 protein	4.60
	430217	N47863	Hs.336901	ribosomal protein S24	4.58
45	429597	NM_003816	Hs.2442	a disintegrin and metalloproteinase doma	4.57
	425932	M81650	Hs.1968	semenogelin I	4.57
	408728	AL137379	Hs.47125	hypothetical protein FLJ13912	4.56
	428434	AW363590	Hs.65551	Homo sapiens, Similar to DNA segment. Ch	4.55
	451254	A1571018	Hs.172967	ESTs	4.54
	422426	W79117	Hs.58559	ESTs	4.54
50	439483	T69980	Hs.58323	Homo sapiens cDNA FLJ11613 fs, clone HE	4.53
	435420	A1928513	Hs.59203	ESTs	4.53
	447519	U48258	Hs.339685	ESTs	4.52
	424176	AL137273	Hs.142307	hypothetical protein	4.52
	414812	X72755	Hs.77367	monokine induced by gamma interferon	4.51
55	438069	N80701	Hs.33790	ESTs	4.50
	450096	A1682088	Hs.79375	holocarboxylase synthetase (biotin-[prop	4.50
	438159	Z83947		gb:H.sapiens mRNA; clone CD 117	4.50
	433925	A1183551	Hs.26481	SBB126 protein	4.48
	417866	AW067903	Hs.82772	collagen, type XI, alpha 1	4.48
60	433384	A1021992	Hs.124244	ESTs	4.47
	421863	A952677	Hs.108972	Homo sapiens mRNA; cDNA DKFZp434P228 (fr	4.47
	453941	U39817	Hs.36820	Bloom syndrome	4.45
	423401	NM_001992	Hs.126087	coagulation factor II (thrombin) recepto	4.44
	430510	AW182916	Hs.241576	hypothetical protein PRO2577	4.43
65	424084	A1940675	Hs.20914	hypothetical protein FLJ23056	4.42
	459587	AA031966		gb:zkl15e04.a1 Soares_pregnant_uterus_NbH	4.42
	417956	AA210704	Hs.190465	ESTs	4.42
	449433	A1672096	Hs.9012	ESTs, Weakly similar to S26650 DNA-bind	4.42
	421477	A1904743	Hs.104650	hypothetical protein FLJ10292	4.42
70	406687	M31126	Hs.272620	pregnancy specific beta-1-glycoprotein 9	4.41
	451813	NM_016117	Hs.27182	phospholipase A2-activating protein	4.41
	415091	AL044872	Hs.77910	3-hydroxy-3-methylglutaryl-Coenzyme A sy	4.40
	425142	AW954397	Hs.154762	HIV-1 rev binding protein 2	4.40
	441720	A1346487	Hs.28739	ESTs	4.40
75	409683	U33317	Hs.711	defensin, alpha 6, Paneth cell-specific	4.39
	411571	AA122393	Hs.70811	hypothetical protein FLJ20516	4.38
	430044	AA464510	Hs.152812	ESTs	4.37
	436246	AW450963	Hs.119991	ESTs	4.37
	409582	R27430	Hs.271565	ESTs	4.37
80	453652	AW009640	Hs.28368	ESTs, Moderately similar to S65657 alpha	4.35
	425211	M18667	Hs.1867	progastricain (pepsinogen C)	4.34
	448692	AW013907	Hs.167531	methylcrotonyl-Coenzyme A carboxylase 2	4.34
	409459	D86407	Hs.54481	low density lipoprotein receptor-related	4.34
	442470	AW273860	Hs.5759	ESTs	4.33



5	441894	AA134329	Hs.24170	Homo sapiens, clone IMAGE:3685398, mRNA	4.32
	422867	L32137	Hs.1584	cartilage oligomeric matrix protein (jso	4.31
	436396	A1683487	Hs.152213	wingless-type MMTV Integration site fami	4.31
	433397	AW079768	Hs.134860	ESTs, Weakly similar to unnamed protein	4.30
	417576	AA339449	Hs.82285	phosphoribosylglycinamide formyltransfer	4.29
	413278	BE563085	Hs.833	Interferon-stimulated protein, 15 kDa	4.29
	451592	AJ805416	Hs.213897	ESTs	4.28
	453900	AW003582	Hs.226414	ESTs, Weakly similar to ALU8_HUMAN ALU S	4.28
10	422892	AA988176	Hs.121553	hypothetical protein FLJ20641	4.26
	431699	NM_001173	Hs.267831	Rho GTPase activating protein 5	4.26
	428389	AW135714	Hs.283127	ESTs, Weakly similar to T19201 hypotheti	4.24
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	4.23
	409913	BE243842	Hs.283077	centrosomal P4.1-associated protein; unc	4.22
	445637	AJ245671	Hs.12844	EGF-like domain, multiple 6	4.21
15	445640	AW969626	Hs.31704	ESTs, Weakly similar to KIAA0227 (Hsapi	4.20
	422232	D43945	Hs.113274	transcription factor EC	4.18
	426555	AW027457	Hs.30323	ESTs, Weakly similar to B34087 hypotheti	4.18
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypotheti	4.16
20	434217	AW014795	Hs.23349	ESTs	4.16
	413384	NM_000401	Hs.75334	exostoses (multiple) 2	4.14
	407768	AW002841	Hs.29475	ESTs	4.14
	419168	AJ338132	Hs.33718	Homo sapiens cDNA FLJ12641 fs, clone NT	4.13
	408165	AL137573	Hs.43143	Homo sapiens mRNA; cDNA DKFZp564A2463 (I	4.12
25	443691	AJ081724	Hs.17267	ESTs	4.12
	409640	U78722	Hs.55481	zinc finger protein 165	4.12
	438176	AW138970	Hs.122113	ESTs	4.10
	435532	AW291488	Hs.117305	Homo sapiens, clone IMAGE:3682908, mRNA	4.10
	419606	AW294795	Hs.198529	ESTs	4.08
30	452824	W27643	Hs.73965	splicing factor, arginine/serine-rich 2	4.08
	414152	NM_003248	Hs.75774	thrombospondin 4	4.08
	418688	T85017	Hs.1192	KIAA0074 protein	4.07
	404253			NA	4.06
	421741	AK001879	Hs.107527	hypothetical protein FLJ11017	4.06
35	428218	AA424266	Hs.123642	EphA3	4.06
	428858	AA436760		gb:zv67d11.r1 Soares_tetal_fetus_Nb2HF8_	4.06
	428338	AA503115	Hs.183752	microseminoprotein, beta-	4.05
	442875	BE623003	Hs.23625	Homo sapiens clone TCCCTA00142 mRNA sequ	4.04
	421841	AA908197	Hs.108850	MAK-related kinase	4.04
40	451177	AJ969716	Hs.13034	ESTs	4.04
	425188	AK002052	Hs.155071	hypothetical protein FLJ11190	4.04
	421262	AA286746	Hs.9343	Homo sapiens cDNA FLJ14265 fs, clone PL	4.03
	424634	NM_003613	Hs.151407	cartilage intermediate layer protein, nu	4.02
	438777	AA825487	Hs.142179	ESTs	4.02
45	423343	AA324643	Hs.246106	ESTs	4.02
	425788	BE466417	Hs.231899	ESTs, Weakly similar to rab3 effector-5	4.02
	409928	AL137163	Hs.57549	hypothetical protein dJ47384	4.01
	406671	AA129547	Hs.285754	met proto-oncogene (hepatocyte growth fa	4.01
	442973	BE587665	Hs.288550	Homo sapiens cDNA: FLJ23156 fs, clone L	4.00
50	433225	AW816515	Hs.173540	ATPase, Class V, type 100	4.00
	411765	H43346		gb:yp09a04.r1 Soares breast 3NbHBst Homo	4.00
	452022	AW072330	Hs.293875	ESTs	4.00
	451806	NM_003729	Hs.27076	RNA 3'-terminal phosphate cyclase	3.99
	423541	AA286922	Hs.129778	gastrointestinal peptide	3.99
55	414132	AJ801235	Hs.48480	ESTs	3.99
	452453	AJ902519		gb:QV-BT009-101198-051 BT009 Homo sapien	3.98
	418454	AA315308	Hs.195870	hypothetical protein FLJ14991	3.98
	430134	BE380149	Hs.105223	ESTs, Weakly similar to T33188 hypotheti	3.98
	453160	AJ263307	Hs.239884	H2B histone family, member L	3.97
60	417235	AA810278	Hs.24250	ESTs	3.96
	425398	AL049689	Hs.156369	hypothetical protein similar to tenascin	3.95
	414136	AA812434	Hs.119023	SAC2 (structural maintenance of chromoso	3.94
	436608	AA628980	Hs.192371	down syndrome critical region protein DS	3.94
	431753	X76029	Hs.2841	neuromedin U	3.94
65	453161	AA628608	Hs.61656	ESTs	3.94
	454821	AW833504		gb:QV4-TT0008-091199-025-03 TT0008 Homo	3.94
	427961	AW293165	Hs.143134	ESTs	3.94
	439453	BE264974	Hs.6566	thyroid hormone receptor interactor 13	3.93
	409564	AA045857	Hs.54943	fracture callus 1 (rat) homolog	3.93
70	418396	AJ765805	Hs.26691	ESTs	3.92
	451411	AA017492	Hs.135655	EST	3.92
	445885	AJ734009	Hs.127699	KIAA1603 protein	3.92
	407698	AA058900	Hs.32646	hypothetical protein FLJ21901	3.91
	442896	R37725	Hs.261108	ESTs	3.90
75	433361	AW469373	Hs.300141	ribosomal protein L39	3.90
	419926	AW900992	Hs.93796	DKFZP586O2223 protein	3.89
	413775	AW409934	Hs.75528	nucleolar GTPase	3.88
	452943	BE247449	Hs.31082	hypothetical protein FLJ10525	3.86
	428549	AA430064	Hs.220929	Homo sapiens cDNA FLJ14369 fs, clone HE	3.86
80	456120	AA535244	Hs.78305	RAB2, member RAS oncogene family	3.86
	452194	AJ994413	Hs.332649	olfactory receptor, family 2, subfamily	3.85
	421247	BE391727	Hs.102910	general transcription factor IIH, polype	3.85
	417720	AA205625	Hs.208067	ESTs	3.85
	418811	AK001407	Hs.88663	hypothetical protein FLJ10545	3.84

	430899	BE018217	Hs.183528	hypothetical protein FLJ14906	3.84
	421246	AWS82962	Hs.102897	CGI-47 protein	3.83
	407366	AF026942		gb:Homo sapiens cig33 mRNA, partial sequ	3.83
5	428698	AA852773	Hs.334838	KIAA1866 protein	3.82
	435202	AJ971313	Hs.170204	KIAA0551 protein	3.82
	454074	R63503	Hs.28419	ESTs	3.82
	448917	AJ683598	Hs.201615	ESTs	3.82
	410507	AA355288	Hs.40834	transitional epithelia response protein	3.82
10	452571	W31518	Hs.34665	ESTs	3.82
	445663	AJ247343	Hs.149232	ESTs	3.82
	450701	H39960	Hs.268467	Homo sapiens cDNA FLJ12280 fis, clone MA	3.80
	423025	AA831267	Hs.12244	hypothetical protein FLJ20097	3.80
	425656	AB018284	Hs.158688	KIAA0741 gene product	3.80
	407168	R45175	Hs.117183	ESTs	3.79
15	403422	NA		NA	3.79
	425492	AL021918	Hs.158174	zinc finger protein 184 (Kruppel-like)	3.79
	432239	X81334	Hs.2936	matrix metalloproteinase 13 (collagenase	3.79
	457325	AA744550	Hs.136345	ESTs	3.78
20	433800	AJ034361	Hs.135150	lung type-I cell membrane-associated gly	3.77
	428865	BE544095	Hs.164960	Barf1-like homeobox 1	3.76
	424188	AW954552	Hs.142634	zinc finger protein	3.75
	424638	AJ472106	Hs.49303	Homo sapiens cDNA FLJ11663 fis, clone HE	3.75
	451099	RS2785	Hs.25954	Interleukin 13 receptor, alpha 2	3.75
25	448105	AW591433	Hs.298241	Transmembrane protease, serine 3	3.74
	452785	AL135942	Hs.296434	erythroid differentiation and denudeat	3.74
	459000	AA903705	Hs.4190	Homo sapiens cDNA: FLJ23269 fs, clone C	3.74
	432653	N62096	Hs.293185	ESTs, Weakly similar to JCT328 amino aci	3.73
	409632	W74001	Hs.55279	serine (or cysteine) proteinase inhibito	3.73
30	414883	AA926960	Hs.334883	CDC28 protein kinase 1	3.73
	415064	AA159804	Hs.149305	hypothetical protein MGC2603	3.72
	432198	AJ475306	Hs.50458	ESTs	3.72
	458194	AW383618	Hs.265459	ESTs, Moderately similar to ALU2_HUMAN A	3.72
	415263	AA948033	Hs.130853	ESTs	3.71
35	408296	AL117452	Hs.44155	DKFZP586G1517 protein	3.71
	408460	AA054726	Hs.285574	ESTs	3.71
	437496	AA452378	Hs.170144	Homo sapiens mRNA: cDNA DKFZp547J125 (tr	3.70
	443486	NM_003428	Hs.9450	zinc finger protein 84 (HPF2)	3.68
	432021	AA524470	Hs.58753	ESTs	3.68
	420092	AA814043	Hs.88045	ESTs	3.68
40	414923	AW445008	Hs.77637	homeo box A4	3.68
	429432	AJ678059	Hs.202676	synaptonemal complex protein 2	3.68
	435496	AW840171	Hs.265398	ESTs, Weakly similar to transformation-r	3.67
	430544	AA481066	Hs.105153	Homo sapiens, clone IMAGE:3461987, mRNA,	3.67
45	432542	AW083920	Hs.16098	claudin 2	3.67
	410782	AW504860	Hs.288836	hypothetical protein FLJ12673	3.66
	421106	AA877124	Hs.172844	ESTs	3.64
	439107	AL046134	Hs.13944	adrenergic, beta, receptor kinase 2	3.64
	418735	N48769	Hs.44609	ESTs	3.64
50	411598	BE336654	Hs.70937	H3 histone family, member A	3.63
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	3.63
	436411	AW674352		gb:ba63c07.y1 NIH_MGC_12 Homo sapiens cD	3.63
	429774	AI522215	Hs.50883	KIAA1804 protein	3.62
	448844	AI581519	Hs.177164	ESTs	3.61
55	402473	AB033035	Hs.51965	KIAA1209 protein	3.61
	441085	AW136551	Hs.181245	Homo sapiens cDNA FLJ12532 fis, clone NT	3.61
	429534	AW976987	Hs.163327	ESTs, Weakly similar to 2109260A B cell	3.60
	414706	AW340125	Hs.76989	KIAA0097 gene product	3.60
	436211	AK001581	Hs.334828	hypothetical protein FLJ10719; KIAA1794	3.59
60	422938	NM_001809	Hs.1594	centromere protein A (17kD)	3.59
	451381	BE241831	Hs.172330	hypothetical protein MGC2705	3.58
	428664	AK001668	Hs.189095	similar to SALL1 (sal (Drosophila)-like	3.58
	424345	AK001380	Hs.145479	Homo sapiens cDNA FLJ10518 fis, clone NT	3.58
	440717	AA904527	Hs.42207	ESTs	3.58
65	450698	W31489	Hs.95044	ESTs, Weakly similar to 138022 hypotheti	3.58
	423675	AI990509	Hs.131342	small inducible cytokine subfamily A (Cy	3.58
	424882	AJ379461	Hs.153636	far upstream element (FUSE) binding prot	3.57
	410784	AW803201		gb:IL2-UM0077-070500-080-E08 UM0077 Homo	3.55
	411096	U80034	Hs.68583	mitochondrial intermediate peptidase	3.55
70	430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	3.54
	439225	AA192669	Hs.45032	ESTs	3.54
	429183	AB014604	Hs.197855	KIAA0704 protein	3.54
	419948	AB041035	Hs.93847	NADPH oxidase 4	3.53
	443426	AF098158	Hs.9329	chromosome 20 open reading frame 1	3.52
75	408556	U49516	Hs.46362	5-hydroxytryptamine (serotonin) receptor	3.52
	417048	AI088775	Hs.55498	geranylgeranyl diphosphate synthase 1	3.52
	432101	AJ918950	Hs.123642	EphA3	3.52
	419216	AL076718	Hs.164021	small inducible cytokine subfamily B (Cy	3.51
	444754	T83911	Hs.11881	transmembrane 4 superfamily member 4	3.51
80	422093	AF151852	Hs.111449	CGI-94 protein	3.50
	404766	NA		NA	3.50
	441513	AW014557	Hs.112420	ESTs	3.50
	444301	AK000136	Hs.10760	asporin (LRR class 1)	3.50
	417315	AI080042	Hs.336901	ribosomal protein S24	3.50

	407182	AA312551	Hs.230157	ESTs	3.49
	443204	AW205878	Hs.29643	Homo sapiens cDNA FLJ13103 fs, clone NT	3.49
	432289	AI860145	Hs.55118	ESTs	3.49
	453844	AI813444	Hs.42197	ESTs	3.48
5	427588	NA5214	Hs.282387	Homo sapiens cDNA: FLJ21837 fs, clone H	3.48
	405468			NA	3.48
	410804	U64820	Hs.66521	Machado-Joseph disease (spinocerebellar	3.48
	430357	AW976789	Hs.165607	ESTs	3.46
10	418428	Y12490	Hs.85092	thyroid hormone receptor interactor 11	3.46
	422260	AA315993	Hs.105484	regenerating gene type IV	3.46
	421928	AF013758	Hs.109643	polyadenylate binding protein-interactin	3.46
	451403	AA885569	Hs.40919	Homo sapiens cDNA FLJ14511 fs, clone NT	3.46
	406117			NA	3.46
15	458242	BE289588	Hs.28465	Homo sapiens cDNA: FLJ21859 fs, clone H	3.46
	408562	AI436323	Hs.31141	Homo sapiens mRNA for KIAA1568 protein,	3.45
	440105	AA694010	Hs.6932	Homo sapiens clone Z3809 mRNA sequence	3.45
	443767	BE562136	Hs.9736	proteasome (prosome, macropain) 26S subu	3.45
	426320	W47595	Hs.169300	transforming growth factor, beta 2	3.45
	444478	W07318	Hs.240	M-phase phosphoprotein 1	3.45
20	425904	AI805990	Hs.82238	POP4 (processing of precursor, S. cerev	3.44
	416702	AA186428	Hs.85591	ESTs	3.44
	448668	AI560305	Hs.199852	ESTs	3.42
	410004	AI298027	Hs.5057	carboxypeptidase D	3.42
25	428771	AB028992	Hs.193143	KIAA1069 protein	3.42
	446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteononin,	3.42
	429628	H09604	Hs.13268	ESTs	3.40
	448816	AB033052	Hs.22151	KIAA1226 protein	3.40
	456032	AW957446	Hs.301711	ESTs	3.39
30	439635	AA477288	Hs.94891	hypothetical protein FLJ22729	3.39
	414275	AW970254	Hs.889	Charol-Layden crystal protein	3.38
	447207	AA442233	Hs.17731	hypothetical protein FLJ12892	3.38
	416057	AI927382	Hs.29857	ESTs	3.38
	430704	AW813091	Hs.335799	ESTs	3.38
35	423600	AI633559	Hs.310359	ESTs	3.38
	453891	AB037751	Hs.36353	Homo sapiens mRNA full length insert cDN	3.38
	430178	AW449612	Hs.152475	ESTs	3.37
	417791	AW965339	Hs.111471	ESTs	3.37
	408887	AA437199	Hs.656	cell division cycle 25C	3.37
40	449802	AW901804	Hs.23984	hypothetical protein FLJ20147	3.37
	457003	S78234	Hs.172405	cell division cycle 27	3.36
	458076	R80061	Hs.164478	hypothetical protein FLJ21939 similar to	3.36
	436203	BE384982	Hs.5076	Homo sapiens cDNA: FLJ22128 fs, clone H	3.36
	418782	AI792648	Hs.14665	ESTs	3.34
45	449722	BE280074	Hs.23960	cyclin B1	3.34
	447984	AA457263	Hs.37244	ESTs	3.34
	451103	R52804	Hs.25956	DKFZP564D206 protein	3.34
	408812	BE397160	Hs.254763	ESTs, Weakly similar to A42442 integrin	3.34
	448305	AA625207	Hs.264915	Homo sapiens cDNA FLJ12908 fs, clone NT	3.34
50	418849	AW474547	Hs.53565	Homo sapiens PIG-M mRNA for mannosyltran	3.33
	450531	AW301032	Hs.203800	ESTs	3.32
	411263	BE297802	Hs.69360	kinesin-like 6 (mitotic centromere-assoc	3.32
	416530	U62801	Hs.79361	kallikrein 6 (neurosin, zyme)	3.31
	425746	NM_001701	Hs.159440	bile acid Coenzyme A: amino acid N-acylt	3.30
55	421037	AI684808	Hs.197653	ESTs	3.30
	430388	AA356923	Hs.240770	nuclear cap binding protein subunit 2, 2	3.30
	433132	AB026264	Hs.284245	hypothetical protein IMPACT	3.30
	447078	AW885727	Hs.301570	ESTs	3.30
	402408	NA		NA	3.29
60	437044	AL035864	Hs.69517	cDNA for differentially expressed CO16 g	3.29
	423126	AA322245	Hs.290165	ESTs	3.28
	446223	BE300091	Hs.119699	hypothetical protein FLJ12969	3.27
	451917	AW391351	Hs.50820	Homo sapiens unknown mRNA	3.27
	419335	AW960146	Hs.284137	hypothetical protein FLJ12688	3.26
65	411078	AI222020	Hs.182364	CocoaCrisp	3.26
	419790	U79250	Hs.93201	glycerol-3-phosphate dehydrogenase 2 (mi	3.26
	427119	AW880562	Hs.114574	ESTs	3.26
	400250	NA		NA	3.26
	429044	AI261490	Hs.145527	ESTs	3.25
70	451050	AW937420	Hs.69862	ESTs	3.24
	447425	AI963747	Hs.18573	acylphosphatase 1, erythrocyte (common)	3.24
	410389	AW954049	Hs.8177	ESTs, Weakly similar to PIHUB6 salivary	3.23
	416565	AW000960	Hs.44970	endoplasmic reticulum resident protein 5	3.22
	442028	AI239437	Hs.48945	ESTs	3.22
75	409110	AA191493	Hs.48778	riban protein	3.22
	418926	AA232658	Hs.105794	UDP-glucose:glycoprotein glucosyltransfe	3.22
	408353	BE439838	Hs.44298	mitochondrial ribosomal protein S17	3.21
	445417	AK001058	Hs.12680	Homo sapiens cDNA FLJ10196 fs, clone HE	3.20
	442979	AW440782	Hs.174743	ESTs	3.20
	439292	AA090421	Hs.5555	hypothetical protein MGC5347	3.20
80	440953	AI683036	Hs.124135	Homo sapiens cDNA FLJ13051 fs, clone NT	3.20
	447020	T27308	Hs.16986	hypothetical protein FLJ11046	3.20
	451181	AI796330	Hs.207461	ESTs	3.19
	422809	AK001379	Hs.121028	hypothetical protein FLJ10549	3.19

5	411573	AB029000	Hs.70823	KIAA1077 protein	3.19
	424539	U02911	Hs.150402	activin A receptor, type I	3.18
	443179	A1928402	Hs.6933	hypothetical protein FLJ12684	3.18
	452545	N31940	Hs.14434	ESTs, Weakly similar to I380222 hypothe	3.18
	433024	AA573847	Hs.26549	KIAA1708 protein	3.18
	414737	A1160386	Hs.125087	ESTs	3.18
	444230	H95537	Hs.146067	ESTs	3.18
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	3.17
10	428945	AW192803	Hs.98974	ESTs, Weakly similar to S65824 reverse t	3.17
	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	3.17
	418661	NM_001949	Hs.1189	E2F transcription factor 3	3.17
	443598	AW499970	Hs.14822	ESTs, Weakly similar to I78885 serine/th	3.16
	413518	BE145907		gb:MR0-HT0208-221299-204-e12 HT0208 Homo	3.16
	434389	AA971235	Hs.128098	ESTs	3.16
15	431322	AW970622		gb:EST382704 MAGE resequences, MAGK Homo	3.15
	432158	W33165	Hs.22983	UDP-glucose:glycoprotein glucosyltransfe	3.15
	453331	A1240665	Hs.8895	ESTs	3.15
	410286	A1739159	Hs.81898	DKFZP586N2124 protein	3.14
20	408667	AL110280	Hs.301152	Homo sapiens mRNA; cDNA DKFZp434F053 (tr	3.14
	422789	AK001113	Hs.120842	hypothetical protein FLJ10251	3.14
	419078	M93119	Hs.89584	insulinoma-associated 1	3.14
	414080	AA135257	Hs.47783	B aggressive lymphoma gene	3.14
	451525	AW001757	Hs.14005	ESTs	3.13
25	453775	NM_002916	Hs.35120	replication factor C (activator 1) 4 (37	3.13
	433183	AF231338	Hs.222024	transcription factor BMAL2	3.12
	424783	AA913909	Hs.153088	TATA box binding protein (TBP)-associate	3.12
	413170	BE068819		gb:MR0-BT0374-220300-001-b03 BT0374 Homo	3.12
	437181	A1306615	Hs.125343	ESTs, Weakly similar to KIAA0758 protein	3.12
30	442991	BE281238	Hs.8886	hypothetical protein FLJ20424	3.11
	453867	A1929383	Hs.33032	hypothetical protein DKFZp434N185	3.11
	437641	AA811452	Hs.291911	ESTs	3.10
	428651	AF196478	Hs.188401	annexin A10	3.09
	427927	A1879165	Hs.2227	CCAAT/enhancer binding protein (C/EBP),	3.09
35	419196	AF110908	Hs.297660	TNF receptor-associated factor 3	3.09
	414569	AF109298	Hs.118258	prostate cancer associated protein 1	3.09
	408633	AW863372	Hs.46677	PRO2000 protein	3.09
	403381			NA	3.08
	444819	BE538082	Hs.8172	ESTs, Moderately similar to A46010 X-link	3.08
40	422363	T55979	Hs.115474	replication factor C (activator 1) 3 (38	3.08
	434138	AA625804		gb:zu86h01.s1 Soares_testis_NHT Homo sap	3.07
	425322	U63630	Hs.155637	protein kinase, DNA-activated, catalytic	3.07
	436556	A1364997	Hs.7572	ESTs	3.07
	427043	AA397679	Hs.3991	ESTs	3.06
45	443055	AV653742	Hs.15536	hypothetical protein DKFZp781J139	3.06
	419229	A1827237	Hs.282884	ESTs	3.05
	414718	H95348	Hs.107987	ESTs	3.05
	439737	A1751438	Hs.41271	Homo sapiens mRNA full length insert cDN	3.05
	448587	A1539552	Hs.28338	KIAA1546 protein	3.04
50	448595	AB014544	Hs.21572	KIAA0644 gene product	3.04
	407201	N31998	Hs.164256	hypothetical protein FLJ20657	3.04
	423065	R96158	Hs.267130	Homo sapiens, clone MGC:5406, mRNA, comp	3.04
	431980	AA523696	Hs.324507	hypothetical protein FLJ20986	3.04
	416198	H27332	Hs.99598	hypothetical protein MGC5338	3.04
55	429410	X98494	Hs.201676	M-phase phosphoprotein 10 (U3 small nucl	3.04
	432140	AK000404	Hs.272688	hypothetical protein FLJ20397	3.03
	441031	A110684	Hs.7645	fibrinogen, B beta polypeptide	3.03
	446142	A1754693	Hs.145968	ESTs	3.02
	402167			NA	3.02
60	402299			NA	3.02
	417830	AW504786	Hs.122579	hypothetical protein FLJ10461	3.02
	419910	AA662913	Hs.190173	ESTs, Weakly similar to A46010 X-linked	3.02
	424001	W67883	Hs.137476	paternally expressed 10	3.01
	413930	M86153	Hs.75618	RAB11A, member RAS oncogene family	3.01
65	439924	A1985897	Hs.125293	ESTs	3.01
	414343	AL036166	Hs.323378	coated vesicle membrane protein	3.01
	432201	A1538613	Hs.298241	Transmembrane protease, serine 3	3.00
	445845	A1261870	Hs.145555	ESTs	3.00
	420727	H75701	Hs.99886	complement component 4-binding protein,	3.00
70	427510	Z47542	Hs.179312	small nuclear RNA activating complex, po	3.00
	403637	NA		NA	3.00
	410547	AK000305	Hs.67055	hypothetical protein FLJ20298	3.00
	413430	R22479	Hs.167073	Homo sapiens cDNA FLJ13047 fs, clone NT	3.00
	423575	C18863	Hs.163443	Homo sapiens cDNA FLJ11576 fs, clone HE	2.99
75	426711	AA383471	Hs.180669	conserved gene amplified in osteosarcoma	2.99
	442204	A1635450	Hs.21914	ESTs	2.98
	429682	NM_006306	Hs.211602	SMC1 (structural maintenance of chromoso	2.98
	419227	BE537383	Hs.89739	cholinergic receptor, nicotinic, beta po	2.97
	447233	AW246333	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	2.97
80	441826	AW503603	Hs.129915	phosphotriesterase related	2.97
	433404	T32982	Hs.102720	ESTs	2.96
	450506	NM_004460	Hs.418	fibroblast activation protein, alpha	2.96
	423880	BE278111	Hs.134200	DKFZP564C186 protein	2.96
	411750	BE582298	Hs.71827	KIAA0112 protein; homolog of yeast ribos	2.96

5	408155	A8014528	Hs.43133	KIAA0628 gene product	2.96
	424131	AA335714	Hs.199665	ESTs	2.96
	451250	AA491275	Hs.236940	hypothetical protein FLJ12542	2.96
	425154	NM_001851	Hs.154850	collagen, type IX, alpha 1	2.96
	447829	AI433029	Hs.164104	ESTs	2.95
	410561	BE540255	Hs.6994	Homo sapiens cDNA: FLJ22044 fs, clone H	2.95
	417873	BE266659	Hs.293659	Homo sapiens, Similar to RIKEN cDNA A430	2.95
	452593	T79153	Hs.48589	zinc finger protein 228	2.95
10	407742	AF186252	Hs.38084	sulfotransferase family, cytosolic, 1C,	2.94
	421430	AW207555	Hs.97093	Homo sapiens cDNA: FLJ23004 fs, clone L	2.94
	407995	AI094748	Hs.100134	hypothetical protein FLJ12787	2.94
	413281	AA861271	Hs.222024	transcription factor BMAL2	2.94
	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.94
	441020	W79283	Hs.35962	ESTs	2.94
15	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kD)	2.94
	420005	AW271106	Hs.133294	ESTs	2.93
	412530	AA766268	Hs.266273	hypothetical protein FLJ13346	2.93
	435602	AF217515	Hs.283532	uncharacterized bone marrow protein BM03	2.93
20	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13090 fs, clone NT	2.93
	443341	AW631480	Hs.8688	ESTs	2.92
	436481	AA379597	Hs.5199	HSPC150 protein similar to ubiquitin-con	2.92
	410144	W07189	Hs.68185	ESTs, Weakly similar to ARL3_HUMAN ADP-R	2.92
	434450	S78664	Hs.87	retinoblastoma-like 1 (p107)	2.92
25	450402	BE218027	Hs.89969	ESTs	2.92
	422026	U80738	Hs.110826	trinucleotide repeat containing 9	2.92
	421562	AA530994	Hs.334471	ghrelin precursor	2.92
	410434	AF051152	Hs.63868	tol-like receptor 2	2.92
	422665	AJ011812	Hs.119018	transcription factor NRF	2.91
30	428966	AF059214	Hs.194687	cholesterol 25-hydroxylase	2.90
	412416	AI828253	Hs.22580	alkylglycerone phosphate synthase	2.90
	446232	AJ281848	Hs.194691	retinoic acid induced 3	2.90
	454600	AW810001		gb:MR4-ST0124-270300-005-b11 ST0124 Homo	2.90
	438018	AK001160	Hs.5999	hypothetical protein FLJ10298	2.90
35	433252	AB040957	Hs.151343	KIAA1524 protein	2.90
	444355	BE383686	Hs.191621	ESTs, Moderately similar to ALU6_HUMAN A	2.90
	443054	AI745185	Hs.8939	yes-associated protein 65 kDa	2.89
	421308	AA687322	Hs.192843	leucine zipper protein FKSG14	2.89
	411643	AI924519	Hs.192570	hypothetical protein FLJ22028	2.89
40	419559	Y07828	Hs.91096	ring finger protein	2.89
	433527	AW235613	Hs.133020	ESTs	2.88
	426274	D38122	Hs.2007	tumor necrosis factor (ligand) superfamily	2.88
	406182	NA		NA	2.88
	432731	R31178	Hs.287820	fibronectin 1	2.88
45	429274	AI379772	Hs.99206	ESTs	2.87
	418216	AA662240	Hs.283099	AF15q14 protein	2.87
	410168	AK001376	Hs.59346	hypothetical protein FLJ10514	2.86
	452665	AW839326	Hs.330414	ESTs, Moderately similar to S65657 alpha	2.86
	424696	BE439547	Hs.151903	GrpE-like protein cochaperone	2.86
50	410174	AA306007	Hs.59461	DKFZP434C245 protein	2.85
	443640	AJ872643	Hs.134218	ESTs	2.85
	432912	BE007371	Hs.200313	ESTs	2.85
	431611	U58766	Hs.264428	tissue specific transplantation antigen	2.85
	446565	D13757	Hs.311	phosphoribosyl pyrophosphate amidotransf	2.85
55	424770	AA425562	Hs.11065	Homo sapiens HDCME13P mRNA, partial cds	2.84
	418845	AA852985	Hs.89232	chromobox homolog 5 (Drosophila HP1 atph	2.84
	403639	NA		NA	2.84
	451110	AI955040	Hs.265398	ESTs, Weakly similar to transformation-r	2.84
	416185	AW975861	Hs.47367	KIAA1785 protein	2.84
60	444665	BE613126	Hs.47783	B aggressive lymphoma gene	2.83
	423441	R68649	Hs.278359	absent in melanoma 1 like	2.83
	450584	AA040403	Hs.60371	ESTs	2.83
	420191	AW003565	Hs.192323	Homo sapiens mRNA for FLJ00057 protein,	2.83
	425599	AW366745	Hs.214140	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.83
65	424408	AI754813	Hs.146428	collagen, type V, alpha 1	2.83
	448769	N66037	Hs.38173	ESTs	2.82
	444946	AW139205	Hs.156457	hypothetical protein FLJ22408	2.82
	435347	AW014873	Hs.116963	ESTs	2.82
	438435	AA807142	Hs.42194	hypothetical protein FLJ22649 similar to	2.82
70	427687	AW003867	Hs.1570	histamine receptor H1	2.82
	426851	AA393636	Hs.97454	ESTs	2.82
	427970	AA418187	Hs.330515	ESTs	2.82
	442577	AA292998	Hs.163900	ESTs	2.82
	441016	AW138653	Hs.25845	ESTs	2.81
75	414774	X02419	Hs.77274	plasminogen activator, urokinase	2.81
	417160	N76497	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	2.81
	409346	AL162068	Hs.54320	hypothetical protein DKFZp762D096	2.81
	410407	X66839	Hs.63287	carbonic anhydrase IX	2.81
	407137	T97307		gb:ye53h05.s1 Soares fetal liver spleen	2.81
80	435849	BE305242	Hs.16098	claudin 2	2.80
	426695	AW118191	Hs.112729	ESTs	2.80
	428301	AW628666	Hs.98440	ESTs, Weakly similar to I38022 hypotheti	2.80
	420759	T11832	Hs.127797	Homo sapiens cDNA FLJ11381 fs, clone HE	2.80
	421341	AJ243212	Hs.279611	deleted in malignant brain tumors 1	2.80

5	419423	D26488	Hs.90315	KIAA0007 protein	2.79
	452355	N54926	Hs.29202	G protein-coupled receptor 34	2.79
	425826	U97698	Hs.159593	mucin 6, gastric	2.79
	457465	AW301344	Hs.122908	DNA replication factor	2.79
	426472	BE246138	Hs.30853	ESTs	2.79
	424081	NM_006413	Hs.139120	ribonuclease P (30kD)	2.78
	425851	NM_001490	Hs.159642	glucosaminyl (N-acetyl) transferase 1, c	2.78
	419236	AA330447	Hs.135159	Homo sapiens cDNA FLJ11481 fs, clone HE	2.78
10	423430	AF112481	Hs.128501	RAD51, <i>S. cerevisiae</i> , homolog of, B	2.78
	410011	AB020641	Hs.57856	PFTAIRE protein kinase 1	2.78
	453700	AB009426	Hs.560	apolipoprotein B mRNA editing enzyme, ca	2.78
	431250	BE264649	Hs.251377	taxol resistance associated gene 3	2.77
	414043	AI521210	Hs.97877	ESTs	2.77
15	418054	NM_002318	Hs.83354	lysyl oxidase-like 2	2.77
	439223	AW238299	Hs.250618	UL18 binding protein 2	2.76
	425956	M60828	Hs.164568	fibroblast growth factor 7 (keratinocyte	2.76
	437612	AA827715	Hs.105153	Homo sapiens, clone IMAGE:3461987, mRNA,	2.76
	426119	W94997	Hs.189917	ESTs	2.76
20	459574	AI741122	Hs.101810	Homo sapiens cDNA FLJ14232 fs, clone NT	2.76
	442339	BE299668	Hs.227591	ESTs, Weakly similar to 1901303A Leu zip	2.76
	414334	AA824298	Hs.21331	hypothetical protein FLJ10036	2.76
	418217	AI910647	Hs.13442	ESTs	2.76
	420022	AA256253	Hs.120817	ESTs	2.76
25	408243	Y00787	Hs.624	interleukin 8	2.75
	421346	Z34277	Hs.103707	apomucin	2.75
	421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	2.75
	425773	N21279	Hs.237749	ESTs	2.75
	449611	AI970394	Hs.197075	ESTs	2.74
30	424827	AI057094	Hs.96867	Homo sapiens cDNA: FLJ23155 fs, clone L	2.74
	448621	AI097144	Hs.5250	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.74
	428523	AW974540	Hs.98626	ESTs	2.73
	410839	NM_006849	Hs.66581	protein disulfide isomerase	2.73
35	437380	AL359577	Hs.112198	Homo sapiens mRNA; cDNA DKFZp547M073 (h	2.73
	424641	AB001106	Hs.151413	glia maturation factor, beta	2.73
	431708	AI698136	Hs.108873	ESTs	2.73
	436209	AW850417	Hs.254020	ESTs, Moderately similar to unnamed prot	2.73
	441790	AW294909	Hs.132208	ESTs	2.73
	428862	NM_000346	Hs.2316	SRY (sex determining region Y)-box 9 (ca	2.73
40	409506	NM_008153	Hs.54589	NCK adaptor protein 1	2.73
	423482	BE280172	Hs.129228	galactokinase 2	2.73
	417015	M83772	Hs.80876	flavin containing monooxygenase 3	2.72
	448165	NM_005591	Hs.202379	meiotic recombination ( <i>S. cerevisiae</i> ) 11	2.72
	448826	AI580252	Hs.293246	ESTs, Weakly similar to putative p150 (H	2.72
45	447803	BE620578	Hs.30858	ESTs, Weakly similar to S65657 alpha-1C-	2.72
	429703	T93154	Hs.28705	ESTs	2.72
	448796	AA147829	Hs.301431	endothelial zinc finger protein induced	2.72
50	410902	AW809665	Hs.152759	gb:MR4-ST0124-261099-015-g07 ST0124 Homo	2.72
	424745	AA214618	Hs.152759	activator of S phase kinase	2.72
	454469	AW792775	Hs.167073	gb:CMO-UM0001-010300-258-g10 UM0001 Homo	2.72
	458632	AI744445	Hs.167073	Homo sapiens cDNA FLJ13047 fs, clone NT	2.72
	452012	AA307703	Hs.279766	kinesin family member 4A	2.72
	422109	S73265	Hs.1473	gastrin-releasing peptide	2.72
	438008	AA775026	Hs.203802	ESTs	2.72
55	420552	AK000492	Hs.98806	hypothetical protein	2.71
	427038	NM_014633	Hs.173288	KIAA0155 gene product	2.71
	409239	AA740875	Hs.44307	ESTs, Moderately similar to I38022 hypot	2.71
	425371	D49441	Hs.155981	mesothelin	2.71
	439857	AA847194	Hs.232002	ESTs	2.71
60	455309	AW894017	Hs.293847	gb:RC4-NN0027-150400-012-g04 NN0027 Homo	2.71
	439580	AF086401	Hs.293847	ESTs, Moderately similar to S65657 alpha	2.70
	437257	AI283085	Hs.290931	ESTs, Weakly similar to YFJ7_YEAST HYPOT	2.70
	435039	AW043921	Hs.130526	ESTs	2.70
	438796	W67821	Hs.109590	genethonin 1	2.70
65	407013	U35637	Hs.12677	gb:Human nebulin mRNA, partial cds	2.70
	445413	AA151342	Hs.12677	CGI-147 protein	2.70
	418416	U11700	Hs.84999	ATPase, Cu <sup>++</sup> transporting, beta polypept	2.70
	441362	BE614410	Hs.23044	RAD51 ( <i>S. cerevisiae</i> ) homolog (E coli Re	2.69
	448045	AJ297436	Hs.20166	prostate stem cell antigen	2.69
70	441868	AI400276	Hs.183485	ESTs	2.69
	449076	AI627826	Hs.209109	ESTs	2.69
	427528	AU077143	Hs.179565	minichromosome maintenance deficient ( <i>S.</i>	2.69
	427617	D42063	Hs.199179	RAN binding protein 2	2.69
	414618	AI204800	Hs.96978	hypothetical protein MGC10764	2.69
75	441350	AB020690	Hs.7782	paraneoplastic antigen MA2	2.68
	419310	AA236233	Hs.188716	ESTs	2.68
	445279	R41900	Hs.22245	ESTs	2.68
	439741	BE379846	Hs.6904	Homo sapiens mRNA full length insert cDN	2.68
	446692	Z44514	Hs.156829	Homo sapiens mRNA for KIAA1763 protein,	2.68
	449300	AI656959	Hs.222165	ESTs	2.68
80	444585	AW170015	Hs.6594	ESTs	2.68
	444384	BE174527	Hs.11065	Homo sapiens HDCME13P mRNA, partial cds	2.68
	448104	AI674818	Hs.316433	Homo sapiens cDNA FLJ11375 fs, clone HE	2.67
	446839	BE091926	Hs.16244	mitotic spindle coiled-coil related prot	2.67

	428361	NM_015905	Hs.163658	transcriptional intermediary factor 1	2.67
	418971	AA360392	Hs.87113	ESTs	2.66
	446152	AI292036	Hs.150028	ESTs	2.66
	441553	AA261219	Hs.121296	ESTs	2.66
5	403548			NA	2.66
	452699	AW295390	Hs.213062	ESTs	2.66
	449632	W74853	Hs.271593	ESTs, Moderately similar to A47582 B-cell	2.66
	453985	N44545	Hs.251865	ESTs	2.65
	409956	AW103384	Hs.727	inhibin, beta A (activin A, activin AB a	2.65
10	409446	AI561173	Hs.67688	ESTs	2.65
	422094	AF129535	Hs.272027	F-box only protein 5	2.65
	445462	AA378776	Hs.288649	hypothetical protein MGC3077	2.64
	432670	AA806536	Hs.291841	ESTs	2.64
	418634	AK000064	Hs.86905	ATPase, H+ transporting, lysosomal (vacu	2.64
15	453628	AW243307	Hs.83937	hypothetical protein	2.64
	442117	AW664964	Hs.128899	ESTs	2.64
	416248	H99169	Hs.23450	mitochondrial ribosomal protein S25	2.64
	414631	AW970130	Hs.65408	ESTs	2.64
	423268	BE386898	Hs.131162	ESTs, Weakly similar to ALU5_HUMAN ALU S	2.64
20	413597	AW302885	Hs.117183	ESTs	2.63
	446031	AI271704	Hs.16987	Homo sapiens BAC clone RP11-505D17 from	2.63
	450142	AW207469	Hs.24485	chondroitin sulfate proteoglycan 6 (barn	2.63
	436304	AA339622	Hs.108887	ESTs	2.63
	439832	T81829	Hs.14870	Homo sapiens, Similar to hec1 domain and	2.63
25	449207	AL044222	Hs.23255	nucleoporin 155kD	2.62
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	2.62
	414747	U30872	Hs.77204	centromere protein F (350/400kD, mitosis	2.62
	423811	AW299598	Hs.50895	homeo box C4	2.62
	439474	AU824060	Hs.211501	ESTs	2.62
30	417218	AA005247	Hs.285754	met proto-oncogene (hepatocyte growth fa	2.62
	408031	AA081395	Hs.42173	Homo sapiens cDNA FLJ10366 ts, clone NT	2.62
	442821	BE391929	Hs.8752	transmembrane protein 4	2.62
	416245	AA088767	Hs.83883	transmembrane, prostate androgen induced	2.62
35	447917	AL048037	Hs.164588	ESTs, Moderately similar to neuronal thr	2.61
	424840	D79987	Hs.153479	extra spindle poles, S. cerevisiae, homo	2.61
	443268	AI800271	Hs.129445	hypothetical protein FLJ12498	2.61
	403056	RS8624	Hs.2188	eukaryotic translation elongation factor	2.61
	433037	NM_014158	Hs.279938	HSPC067 protein	2.61
40	410358	AW975168	Hs.13337	ESTs, Weakly similar to unnamed protein	2.60
	426181	AA371422	Hs.334371	hypothetical protein MGC13096	2.60
	414853	U31116	Hs.77501	sarcoglycan, beta (43kD dystrophin-assoc	2.60
	457233	AI355009	Hs.221698	ESTs	2.60
	416049	AI970536	Hs.16603	hypothetical protein FLJ13163	2.60
45	418946	AI798841	Hs.164526	ESTs	2.60
	441891	AW129145	Hs.128076	ESTs	2.60
	443742	AW627805	Hs.145421	ESTs	2.60
	433868	AA612960	Hs.337300	ESTs	2.60
	442717	R88362	Hs.180591	ESTs, Weakly similar to T23976 hypotheti	2.59
50	444542	AI161293	Hs.280380	aminopeptidase	2.59
	452940	AA029722	Hs.2173	fucosyltransferase 4 (alpha (1,3) fucosy	2.59
	429170	NM_001394	Hs.2359	dual specificity phosphatase 4	2.59
	417531	NM_003157	Hs.1087	serine/threonine kinase 2	2.59
	401458			NA	2.58
55	436016	AA806465	Hs.121536	Human DNA sequence from clone RP11-472E5	2.58
	430980	AW971904	Hs.122164	diaphanous (Drosophila, homolog) 3	2.58
	441581	BE551408	Hs.127196	ESTs	2.58
	435693	AI033134	Hs.119887	ESTs	2.58
	431814	BE256242	Hs.270847	delta-tubulin	2.58
60	446269	AW263155	Hs.14559	hypothetical protein FLJ10540	2.58
	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	2.58
	456999	AA319798	Hs.298581	eukaryotic translation elongation factor	2.58
	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypotheti	2.58
	434423	NM_006769	Hs.3844	IIM domain only 4	2.57
65	425782	U66468	Hs.159525	cell growth regulatory with EF-hand doma	2.57
	433929	AI375499	Hs.27379	ESTs	2.57
	414907	X90725	Hs.77597	polo (Drosophila)-like kinase	2.57
	411789	AF245505	Hs.72157	DKFZP564I1922 protein	2.57
	435627	W88774	Hs.118370	ESTs	2.57
70	432168	AK000563	Hs.272805	hypothetical protein FLJ20556	2.57
	432375	BE536069	Hs.2962	S100 calcium-binding protein P	2.57
	424057	AI339874	Hs.126593	ESTs	2.57
	424315	AW614850	Hs.193384	putative 28 kDa protein	2.57
	435663	AI023707	Hs.134273	ESTs	2.56
	439277	R80061	Hs.164478	hypothetical protein FLJ21939 similar to	2.56
75	427747	AW411425	Hs.180655	serine/threonine kinase 12	2.56
	438182	AW342140	Hs.182545	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.56
	421102	AI470093	Hs.283085	protocadherin beta 6	2.56
	445725	AK000956	Hs.13209	hypothetical protein FLJ10094	2.56
80	448243	AW369771	Hs.52620	integrin, beta 8	2.56
	442881	AI023175	Hs.167022	ESTs	2.56
	422165	AL041199	Hs.1481	histidine decarboxylase	2.56
	425843	BE313280	Hs.159627	death associated protein 3	2.56
	448569	BE382657	Hs.21486	signal transducer and activator of trans	2.55

5	416806	NM_000288	Hs.79993	peroxisomal biogenesis factor 7	2.55
	438113	AA487908	Hs.8882	ESTs	2.55
	413374	NM_001034	Hs.75319	ribonucleotide reductase M2 polypeptide	2.55
	448275	BE514434	Hs.20830	kinesin-like 2	2.55
	419987	NM_005014	Hs.94070	osteomodulin	2.55
	439929	S73205		glucocorticoid activator factor (human, panc	2.55
	452240	AI591147	Hs.61232	ESTs	2.55
	417806	AI867277	Hs.183733	ESTs	2.55
10	421482	AL135462	Hs.104715	Inversin	2.55
	456884	AA054679	Hs.155150	ribonuclease P (14kD)	2.55
	442961	BE614474	Hs.289074	F-box only protein 22	2.55
	411274	NM_002776	Hs.69423	kalikrein 10	2.55
	419359	AL043202	Hs.90073	chromosome segregation 1 (yeast homolog)	2.54
15	448666	NM_014953	Hs.323346	KIAA1008 protein	2.54
	428911	Z43848	Hs.194478	Homo sapiens mRNA: cDNA DKFZp434O1572 (I	2.54
	452778	R71338	Hs.5921	Homo sapiens cDNA: FLJ21592 fs, clone C	2.54
	430733	AW975920	Hs.283361	ESTs	2.54
	421184	NM_003616	Hs.102456	survival of motor neuron protein interac	2.54
20	435361	AI168596	Hs.117117	ESTs	2.54
	452833	BE559681	Hs.30736	KIAA0124 protein	2.54
	422330	D30783	Hs.115263	epiregulin	2.54
	424962	NM_012288	Hs.153954	TRAM-like protein	2.54
	430264	AA470519		gb:nc711f10.s1 NCI_CGAP_Pr1 Homo sapiens	2.53
25	447178	AW594641	Hs.192417	ESTs	2.53
	411773	NM_006799	Hs.72026	protease, serine, 21 (testisin)	2.53
	433571	AA765256	Hs.135191	ESTs, Weakly similar to unnamed protein	2.53
	419449	HI8417	Hs.57483	Homo sapiens cDNA FLJ14294 fs, clone PL	2.53
	448019	AW947164	Hs.195641	ESTs, Moderately similar to I38022 hypot	2.53
30	408435	AI810721	Hs.95424	ESTs	2.52
	417900	BE250127	Hs.82906	CDC20 (cell division cycle 20, S. cerevi	2.52
	431385	BE178536	Hs.11090	membrane-spanning 4-domains, subfamily A	2.52
	422314	K01900	Hs.73890	interferon, alpha 8	2.52
	441343	AI970348	Hs.132230	ESTs	2.52
35	417185	NM_002484	Hs.81469	nucleotide binding protein 1 (E.coli Min	2.52
	401747			NA	2.52
	448526	AB028946	Hs.21361	KIAA1023 protein	2.52
	419488	AA316241	Hs.90691	nucleophosmin/nucleoplasmin 3	2.52
	413627	BE182082	Hs.246973	ESTs	2.51
40	441285	NM_002374	Hs.167	microtubule-associated protein 2	2.51
	446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	2.51
	429357	AA779725	Hs.164589	ESTs	2.51
	443171	BE281128	Hs.9030	TONDU	2.50
	446636	AC002563	Hs.15767	citron (rho-interacting, serine/threonin	2.50
45	420795	AA323037	Hs.128645	sorting nexin 16	2.50
	448582	AI538880	Hs.94812	ESTs	2.50
	445459	AI478829	Hs.158465	likely ortholog of mouse putative IKK re	2.50
	423909	AJ223183	Hs.135194	immunoglobulin superfamily, member 6	2.50
	414315	Z24878		gb:HSB65D0052 STRATAGENE Human skeletal m	2.50
50	407568	AA740964	Hs.62699	ESTs	2.50
	453911	AW503857	Hs.4007	Sarcolemmal-associated protein	2.50
	431571	AW500486	Hs.180610	splicing factor proline/glutamine rich (	2.50
	433843	AW021423	Hs.112819	ESTs	2.50
	456254	T19844		gb:B711F Heart Homo sapiens cDNA clone B	2.50
55	403137			NA	2.50
	425895	AI269484	Hs.161427	zinc finger protein 215	2.50
	418612	AB037788	Hs.224961	cleavage and polyadenylation specific fa	2.50

TABLE 45B:

60	Key:	Unique Eos probe set identifier number
	CAT number:	Gene cluster number
	Accession:	Genbank accession numbers
65	Key	CAT Number
	410784	1221005_1
	410902	1226078_1
	411765	125700_1
	413170	1351880_1
	413516	1374595_1
	414315	143512_1
70	428858	296453_1
	430264	315008_1
	431322	331543_1
	434138	380572_1
	436411	419334_1
75	438159	45106_2
	439929	48059_1
	451105	859083_1
	452453	918300_1
80	454469	1213727_1
	454600	1226077_1
	454821	1238365_1
	455309	1278153_1
	AW803201	BE079700 BE062940
	AW809665	AW810108 AW809781 AW809844
	H43348	AA248302 AA095182
	BE068819	BE068821 BE068825
	BE145907	BE145796 BE145803 BE145851 BE145923 BE145812 BE145809 BE145852 BE145856
	Z24878	AA494098 F13654 AA494040 AA143127
	AA436760	AW237453 BE327496 N47347 N56967
	AA470519	BE303010 BE302954 BE384120
	AW970622	AA503009 AA502998 AA502989 AA502805 T92188
	AA625804	AW418787 AW074833 AI675642 AI393368
	AW674352	AA715374 Z25205
	Z83947	
	S73205	
	AI761324	AW880941 AW880937
	AI902519	AI902518 AI902516
	AW792775	BE072509 AW792958
	AW810001	AW810092 AW810170 AW809884 AW809664 AW810353 AW810428 AW810209 AW810429 AW810154 AW810168 AW809786 AW810006
	AW809672	AW809694 AW810552 AW810345 AW810432 AW809960
	AW833504	AW833751 AW833493 AW833341
	AW894017	AW893956 AW894032



455254 1699246\_1 T19844 T11755 T11830 T20136 T11957 R45834 R45828 R15595

TABLE 45C:

5 Pkey: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 Nt\_position: Indicates nucleotide positions of predicted exons.

10	Pkey	Ref	Strand	Nt_position
	401458	9187886	Plus	76485-77597
	401644	8576138	Plus	82655-83959
	401747	9789672	Minus	118596-118816, 119119-119244, 119609-119761, 120422-120990, 130161-130381, 130468-130593, 131097-131258, 131866-131932, 132451-132575, 133560-134011
15	402167	8571795	Plus	109122-110357
	402299	6693370	Plus	23367-25175
	402408	9796239	Minus	110326-110491
	403137	9211494	Minus	92349-92572, 92958-93084, 93579-93712, 93949-94072, 94591-94748, 95214-95337
20	403381	9438267	Minus	26009-26178
	403422	9665041	Minus	151169-151561
	403548	8081591	Minus	38760-39352
	403637	8671936	Minus	142647-142771, 145531-145762
	403639	8671948	Plus	113234-113326, 115186-115287, 119649-119788
	403776	7770611	Minus	1414-1513, 1624-1756
25	404253	9367202	Minus	55675-56055
	404440	7528051	Plus	80430-81581
	404766	7882612	Minus	158681-158882, 160838-160973
	404996	6007890	Plus	37999-38145, 38652-38998, 39727-39872, 40557-40674, 42351-42450
30	405466	7767904	Minus	64498-64675
	405770	2735037	Plus	61057-62075
	405817	4071058	Plus	19914-20112, 25655-25810
	406117	9142932	Plus	54304-54584
	406182	5923650	Minus	28256-28935

TABLE 46A: ABOUT 1303 GENES UP-REGULATED IN STOMACH CANCER COMPARED TO NORMAL STOMACH

Table 46A lists about 1303 genes up-regulated in stomach cancer compared to normal stomach. These were selected as for Table 45A except using non-malignant stomach specimens in determining the denominator value and the ratio was equal to or greater than 5.0.

40 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: Ratio of tumor to normal body tissue

45	Pkey	ExAccn	UnigenelD	Unigene Title	R1
	446619	AJ076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	80.50
	414152	NM_003248	Hs.75774	thrombospondin 4	70.52
	421552	AF026692	Hs.105700	secreted frizzled-related protein 4	65.30
50	428698	AA852773	Hs.334838	KIAA1856 protein	61.90
	428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin	50.60
	409041	AB033025	Hs.50081	KIAA1199 protein	44.50
	452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fis, clone PL	41.10
	452862	AW378065	Hs.8687	ESTs	33.50
55	427585	D31152	Hs.179729	collagen, type X, alpha 1 (Schmid metaph	32.10
	424834	AK001432	Hs.153408	Homo sapiens cDNA FLJ10570 fis, clone NT	26.90
	428398	AJ249368	Hs.98558	ESTs	26.40
	409757	NM_001898	Hs.123114	cystatin SN	25.48
	403776			NA	24.90
60	427674	NM_003528	Hs.2178	H2B histone family, member Q	23.80
	419968	X04430	Hs.93913	Interleukin 6 (interferon, beta 2)	23.10
	427108	AB028976	Hs.173571	KIAA1053 protein	21.76
	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	20.70
	400419	AF084545		NA	20.40
65	415989	AJ267700	Hs.317584	ESTs	19.80
	432101	AJ918950	Hs.123842	EphA3	19.70
	418994	AA296520	Hs.89546	selectin E (endothelial adhesion molecu	19.00
	452110	T47687	Hs.26005	Homo sapiens cDNA FLJ11309 fis, clone PL	18.40
	412652	AJ801777	Hs.6774	ESTs	18.20
70	414430	AJ346201	Hs.78118	ubiquitin carboxyl-terminal esterase L1	17.71
	422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	17.38
	448988	Y09783	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	17.36
	437446	AA788946	Hs.16869	ESTs, Moderately similar to CA1C RAT COL	17.00
	440594	AW445167	Hs.126036	ESTs	17.00
75	430044	AA464510	Hs.152812	ESTs	17.00
	426647	AA243464	Hs.294101	pre-B-cell leukemia transcription factor	16.90
	414737	AJ160386	Hs.125087	ESTs	16.50
	427335	AA448542	Hs.251677	G antigen 78	16.30
	423453	AW450737	Hs.128791	CGI-09 protein	15.50
80	414569	AF109298	Hs.118258	prostate cancer associated protein 1	15.40
	401961	NA		NA	15.40
	434551	BE387162	Hs.280858	ESTs, Highly similar to A35661 DNA excis	15.40
	432069	AW975868	Hs.294100	ESTs	15.30
	434699	AA643687	Hs.149425	Homo sapiens cDNA FLJ11980 fis, clone HE	15.30

	409062	AL157488	Hs.50150	Homo sapiens mRNA; cDNA DKFZp564B182 (fr	15.30
	400289	X07820	Hs.2258	matrix metalloproteinase 10 (stromelysin	15.20
	415138	C18356	Hs.295944	tissue factor pathway inhibitor 2	15.20
	428820	AA436187	Hs.172631	integrin, alpha M (complement component	15.19
5	410763	AF279145	Hs.8966	hypothetical protein FLJ21778	15.10
	438639	AI278360	Hs.31409	ESTs	15.10
	458997	AW937420	Hs.69662	ESTs	15.00
	432731	R31178	Hs.287820	fibronectin 1	14.90
	459247	N46243	Hs.110373	ESTs, Highly similar to T42626 secreted	14.70
10	451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	14.70
	452242	R50956	Hs.159993	glycosyltransferase	14.70
	426427	M86699	Hs.169840	TTK protein kinase	14.50
	439924	A985897	Hs.125293	ESTs	14.45
	414869	AA157291	Hs.21479	ubimuclein 1	14.40
15	411573	AB029000	Hs.70823	KIAA1077 protein	14.40
	418693	AI750878	Hs.87409	thrombospondin 1	14.37
	421823	N40850	Hs.28625	ESTs	14.30
	423903	M57765	Hs.1721	interleukin 11	14.20
	419227	BE537383	Hs.89739	cholinergic receptor, nicotinic, beta po	14.10
20	447417	AW732858	Hs.143067	KIAA1602 protein	13.96
	416406	D86961	Hs.79299	lipoma HMGIC fusion partner-like 2	13.90
	445392	AF142419	Hs.15020	homolog of mouse quaking QKI (KH domain	13.90
	412863	AA121673	Hs.59757	zinc finger protein 281	13.90
	449509	AA001615	Hs.84561	ESTs	13.80
25	440953	AI683036	Hs.124135	Homo sapiens cDNA FLJ13051 fs, clone NT	13.80
	432415	T16971	Hs.289014	ESTs, Weakly similar to A43932 mucin 2 p	13.60
	428769	AW207175	Hs.106771	ESTs	13.60
	416292	AA179233	Hs.42390	nasopharyngeal carcinoma susceptibility	13.41
	424580	AA446539	Hs.339024	ESTs, Weakly similar to A46010 X-linked	13.40
30	438459	T49300	Hs.35304	Homo sapiens cDNA FLJ13655 fs, clone PL	13.30
	431958	X63629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	13.26
	406972	M32053		gb:Human H19 RNA gene, complete cds.	13.19
	432368	AW970244	Hs.162188	ESTs	13.18
	424806	AA382523	Hs.105689	MSTP031 protein	13.08
35	440351	AF030933	Hs.7179	RAD1 (S. pombe) homolog	12.98
	437789	AI581344	Hs.127812	ESTs, Weakly similar to T17330 hypotheti	12.90
	447164	AF026941	Hs.17518	Homo sapiens cig5 mRNA, partial sequence	12.80
	417412	X16896	Hs.82112	interleukin 1 receptor, type I	12.80
40	402363	NA		NA	12.78
	444301	AK000136	Hs.10760	asporin (LRR class 1)	12.76
	416783	AA206186	Hs.79889	monocyte to macrophage differentiation-a	12.60
	435706	W31254	Hs.7045	GLD04 protein	12.50
	414618	AI204600	Hs.96978	hypothetical protein MGC10764	12.50
45	439737	AI751438	Hs.41271	Homo sapiens mRNA full length insert cDN	12.49
	405770			NA	12.46
	418678	NM_001327	Hs.167379	cancer/testis antigen	12.45
	414132	AI801235	Hs.48480	ESTs	12.40
	410434	AF051152	Hs.63668	lot-like receptor 2	12.30
50	451092	AI207256	Hs.13768	Homo sapiens mRNA for FLJ00074 protein,	12.26
	407891	AA486620	Hs.41135	endomucin-2	12.20
	450506	NM_004460	Hs.418	fibroblast activation protein, alpha	12.01
	411213	AA676939	Hs.69285	neuropilin 1	12.00
	436476	AA326108	Hs.33829	bHLH protein DEC2	12.00
	413582	AW295647	Hs.71331	hypothetical protein MGC5350	11.90
55	449318	AW236021	Hs.78531	Homo sapiens, Similar to RIKEN cDNA 5730	11.90
	401747			NA	11.88
	409619	AK001015	Hs.55220	BCL2-associated athanogene 2	11.84
	432596	AJ224741	Hs.278481	matrilin 3	11.80
60	400298	AA032279	Hs.61635	slx transmembrane epithelial antigen of	11.73
	425688	U48361	Hs.159223	NGF-A binding protein 2 (ERG1 binding p	11.72
	407938	AA905097	Hs.85050	phospholamban	11.70
	419948	AB041035	Hs.93847	NADPH oxidase 4	11.70
	459645	AA074346	Hs.250715	ESTs	11.51
65	438482	AI624122	Hs.89578	general transcription factor IIH, polype	11.50
	434851	AA806164	Hs.116502	ESTs	11.50
	418699	BE539639	Hs.173030	ESTs, Weakly similar to ALU8_HUMAN ALU S	11.47
	413453	AA129640	Hs.128065	ESTs	11.40
	442028	AI239437	Hs.48945	ESTs	11.40
	428479	Y00272	Hs.184572	cell division cycle 2, G1 to S and G2 to	11.39
70	453313	BE005771	Hs.153746	hypothetical protein FLJ22490	11.20
	421633	AF121860	Hs.106260	sorting nexin 10	11.20
	410339	AI916499	Hs.298258	ESTs	11.20
	448111	AA053486	Hs.20315	interferon-induced protein with tetratri	11.15
75	453857	AL080235	Hs.35861	DKFZP586E1621 protein	11.15
	430217	N47863	Hs.336901	ribosomal protein S24	11.10
	452823	AB012124	Hs.30696	transcription factor-like 5 (basic helix	11.10
	416530	U62801	Hs.79361	kallikrein 6 (neurosin, zyme)	11.06
	416854	H40164	Hs.80296	Purkinje cell protein 4	10.90
80	447072	D61594	Hs.17279	tyrosylprotein sulfotransferase 1	10.90
	424882	AI379461	Hs.153636	far upstream element (FUSE) binding prot	10.80
	448693	AW004854	Hs.228320	hypothetical protein FLJ23537	10.80
	408750	BE294069	Hs.93581	hypothetical protein FLJ10512	10.80
	450221	AA328102	Hs.24641	cytoskeleton associated protein 2	10.80

	436411	AW674352		gb:baf3c07.y1 NIH_MGC_12 Homo sapiens cD	10.80
	441693	AA384673	Hs.7943	RPBS-mediating protein	10.80
	414922	D00723	Hs.77631	glycine cleavage system protein H (amino	10.80
5	441801	AW242799	Hs.86366	ESTs	10.80
	417173	U61397	Hs.81424	ubiquitin-like 1 (sentrin)	10.80
	415727	BE501389	Hs.20848	ESTs, Weakly similar to APAF_HUMAN APOPT	10.80
	414142	AW368397	Hs.150042	Homo sapiens cDNA FLJ14438 fs, clone HE	10.80
	421650	AA781795	Hs.122587	ESTs	10.80
10	439999	AA115811	Hs.6838	ras homolog gene family, member E	10.70
	421814	L12350	Hs.108623	thrombospondin 2	10.69
	415060	AJ223810	Hs.43213	ESTs, Weakly similar to IEFS_HUMAN TRANS	10.67
	421462	AF016495	Hs.104824	aquaporin 9	10.66
	410444	W73484		gb:cd54e04.s1 Soares_fetal_heart_NbHH19W	10.61
15	409743	N48721	Hs.183506	hypothetical protein FLJ14213	10.60
	448142	AJ754693	Hs.145968	ESTs	10.60
	444114	T58003	Hs.10323	Homo sapiens mRNA from chromosome Sq31-3	10.60
	423020	AA383092	Hs.1606	replication protein A3 (14kD)	10.55
	453891	AB037751	Hs.36353	Homo sapiens mRNA full length insert cDN	10.50
20	417352	AA195919		gb:zp95h09.r1 Stratiogene muscle 937209 H	10.46
	417866	AW067903	Hs.82772	collagen, type XI, alpha 1	10.42
	427718	AJ798680	Hs.25933	ESTs	10.40
	412589	R26560	Hs.24305	ESTs	10.40
	433332	AJ367347	Hs.44898	Homo sapiens clone TCCTA00151 mRNA sequ	10.40
25	424717	H03754	Hs.152213	wingless-type MMTV integration site fami	10.30
	450434	AA166950	Hs.195870	hypothetical protein FLJ14991	10.30
	409044	AJ129586	Hs.33033	hypothetical protein FLJ14823	10.30
	423600	AJ633559	Hs.310359	ESTs	10.30
	433819	AW511097	Hs.112765	ESTs	10.18
30	415076	NM_000857	Hs.77890	guanylate cyclase 1, soluble, beta 3	10.10
	410503	AW975746	Hs.188662	KIAA1702 protein	10.10
	433800	AJ034361	Hs.135150	lung type-I cell membrane-associated gly	10.10
	429357	AA779725	Hs.164589	ESTs	10.00
35	452838	U65011	Hs.30743	preferentially expressed antigen in meta	10.00
	414117	W88559	Hs.1787	proteolipid protein 1 (Peltizaeus-Merzbac	10.00
	416198	H27332	Hs.99598	hypothetical protein MGC5338	10.00
	413918	AW015898	Hs.71245	ESTs	10.00
	400570	NA		NA	10.00
40	439333	AW384710	Hs.125258	Homo sapiens cDNA FLJ13795 fs, clone TH	9.97
	444883	AW384082	Hs.104879	serine (or cysteine) proteinase inhibito	9.93
	450101	AV649989	Hs.24385	Human hbc647 mRNA sequence	9.90
	434352	AF129505	Hs.86492	small muscle protein, X-linked	9.90
	453160	AJ263307	Hs.239884	H2B histone family, member L	9.90
	433929	AJ375499	Hs.27379	ESTs	9.89
45	413273	U75679	Hs.75257	stem-loop (histone) binding protein	9.81
	437536	X91221	Hs.144465	ESTs	9.80
	441350	AB020690	Hs.7782	paraneoplastic antigen MA2	9.80
	452291	AF015592	Hs.28853	CDC7 (cell division cycle 7, S. cerevisi	9.80
50	438913	AJ380429	Hs.172445	ESTs	9.80
	417849	AW291587	Hs.82733	nidogen 2	9.78
	424086	AJ351010	Hs.102267	lysyl oxidase	9.72
	428186	AW504300	Hs.295605	mannosidase, alpha, class 2A, member 2	9.70
	414422	AA147224	Hs.337232	ESTs	9.70
	419197	N48921	Hs.27441	KIAA1615 protein	9.70
55	427660	AJ741320	Hs.114121	Homo sapiens cDNA: FLJ23228 fs, clone C	9.70
	449347	AV649748	Hs.295901	KIAA0493 protein	9.70
	409643	AW450866	Hs.257359	ESTs	9.70
	436209	AW850417	Hs.254020	ESTs, Moderately similar to unnamed prot	9.70
	439608	AW864696	Hs.301732	hypothetical protein MGC5306	9.60
60	430290	AJ734110	Hs.136355	ESTs	9.60
	447124	AW976438	Hs.17428	RBP1-like protein	9.60
	413879	AA132961	Hs.212533	Homo sapiens cDNA: FLJ22572 fs, clone H	9.60
	408101	AW968504	Hs.123073	CDC2-related protein kinase 7	9.58
	418067	AJ127958	Hs.83393	cystatin E/M	9.54
65	424001	W67883	Hs.137476	paternally expressed 10	9.50
	443037	AW500305	Hs.299166	synixin 7	9.50
	428493	AK001745	Hs.184628	hypothetical protein FLJ10883	9.50
	420170	U43374	Hs.95631	Human normal keratinocyte mRNA	9.50
	409289	AA576953	Hs.22972	hypothetical protein FLJ13352	9.50
70	443162	T49951	Hs.9029	DKFZP434G032 protein	9.45
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypotheti	9.43
	424026	AJ798295	Hs.137576	ribosomal protein L34 pseudogene 1	9.40
	440052	AJ633744	Hs.195648	ESTs, Weakly similar to 138022 hypotheti	9.40
	403137			NA	9.37
75	418051	AW192535	Hs.19479	ESTs	9.35
	418701	AA814948	Hs.96343	ESTs, Weakly similar to ALUC_HUMAN !!!!	9.30
	430291	AV660345	Hs.238126	CGI-49 protein	9.30
	426137	AL040683	Hs.167031	DKFZP566D133 protein	9.30
	400195	NA		NA	9.30
80	411529	AA430348	Hs.317596	Homo sapiens cDNA FLJ12927 fs, clone NT	9.20
	423938	U77629	Hs.135639	achaete-scute complex (Drosophila) homol	9.20
	414259	W44633	Hs.301296	Homo sapiens cDNA: FLJ23131 fs, clone L	9.20
	415661	AA634543	Hs.79440	ICF-II mRNA-binding protein 3	9.20
	405543	NA		NA	9.20

	420900	AL045633	Hs.44269	ESTs	9.11
	450757	BE081050	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	9.10
	410929	H47233	Hs.30643	ESTs	9.10
5	427319	AW631495	Hs.27135	B-cell receptor-associated protein BAP29	9.10
	443745	AB039670	Hs.9728	ALEX1 protein	9.10
	436574	AW293527	Hs.126465	ESTs	9.10
	407192	AA609200		gb:af12e02.s1 Soares_testis_NHT Homo sap	9.08
	426075	AW513691	Hs.270149	ESTs, Weakly similar to 2109260A B cell	9.07
10	408778	AI500519	Hs.63382	hypothetical protein PRO2714	9.03
	434542	AA769310	Hs.61260	hypothetical protein FLJ13164	9.00
	404440			NA	9.00
	407168	R45175	Hs.117183	ESTs	9.00
	451678	AA374181	Hs.26799	DKFZP564D0764 protein	9.00
15	431946	AI018336	Hs.131730	ESTs	8.92
	408875	NM_015434	Hs.48504	DKFZP434B168 protein	8.90
	409928	AL137163	Hs.57549	hypothetical protein dJ47384	8.90
	430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	8.89
	445029	AF196481	Hs.12256	midline 2	8.86
20	442717	R88362	Hs.180591	ESTs, Weakly similar to T23976 hypothet	8.80
	409089	NM_014781	Hs.50421	KIAA0203 gene product	8.80
	419261	X07876	Hs.89791	wingless-type MMTV integration site fami	8.80
	416190	NS4000		gb:yy99d02.r1 Soares_multiple_sclerosis_	8.80
	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	8.77
25	416440	AI823912	Hs.79335	Homo sapiens, Similar to SW/SNF related	8.76
	421262	AA286746	Hs.9343	Homo sapiens cDNA FLJ14265 fs, clone PL	8.70
	441031	AI110684	Hs.7645	fibrinogen, B beta polypeptide	8.70
	452234	AW084176	Hs.223296	ESTs, Weakly similar to I38022 hypotheti	8.70
	452822	X85689	Hs.288617	hypothetical protein FLJ22621	8.70
30	430462	AI584156	Hs.105640	Homo sapiens, clone IMAGE:4139775, mRNA,	8.65
	426457	AW894667	Hs.169965	chimerin (chimaerin) 1	8.65
	412054	W87482	Hs.302209	ESTs	8.64
	450238	AW162998	Hs.24684	KIAA1376 protein	8.63
	418782	AI792648	Hs.14665	ESTs	8.60
35	452631	AI188658	Hs.87498	ESTs	8.60
	425268	AI807883	Hs.180059	Homo sapiens cDNA FLJ20653 fs, clone KA	8.60
	432014	H66741	Hs.38540	ESTs, Weakly similar to ALU4_HUMAN ALU S	8.60
	440270	NM_015986	Hs.7120	cytokine receptor-like molecule 9	8.60
	414784	NM_000344	Hs.288986	survival of motor neuron 1, telomeric	8.60
40	426809	BE313114	Hs.29706	ESTs	8.60
	419704	AA429104	Hs.45057	ESTs	8.60
	452909	NM_015368	Hs.30985	pannexin 1	8.60
	432639	AW973785		gb:EST385886 MAGE resequences, MAGM Homo	8.60
	430418	RS8852	Hs.35029	heart and neural crest derivatives expe	8.58
45	450480	X82125	Hs.25040	zinc finger protein 239	8.58
	444984	H15474	Hs.132898	fatty acid desaturase 1	8.58
	419086	NM_000216	Hs.89591	Katlmann syndrome 1 sequence	8.57
	430518	AW363687	Hs.82916	chaperonin containing TCP1, subunit 6A (	8.50
	424735	U31875	Hs.272499	short-chain alcohol dehydrogenase family	8.50
50	414061	NM_000699	Hs.300280	amylase, alpha 2A; pancreatic	8.50
	407894	AJ278313	Hs.41143	phosphatidyl-specific phospholipase	8.50
	441079	AW150697	Hs.107418	ESTs	8.50
	419354	M62839	Hs.1252	apolipoprotein H (beta-2-glycoprotein I)	8.50
	418618	U66097	Hs.86724	GTP cyclohydrolase 1 (dopa-responsive dy	8.50
55	416565	AW000960	Hs.44970	endoplasmic reticulum resident protein 5	8.50
	441540	C01367	Hs.127128	ESTs	8.50
	416434	AW163045	Hs.79334	nuclear factor, interleukin 3 regulated	8.50
	417801	AA417383	Hs.82582	integrin, beta-like 1 (with EGF-like rep	8.50
	426855	AL117427	Hs.172778	Homo sapiens mRNA; cDNA DKFZp566P013 (tr	8.48
60	436515	AJ278111	Hs.195292	putative tumor antigen	8.43
	416315	AA179483	Hs.73605	ESTs	8.42
	408432	AW195262		gb:cn67b05.x1 NC1_CGAP_CML1 Homo sapiens	8.40
	410094	BE147897	Hs.58593	general transcription factor IIF, polype	8.40
	419198	AA234938	Hs.87384	ESTs	8.36
65	448920	AW408009	Hs.22580	alkylglycerone phosphate synthase	8.36
	410305	AF030409	Hs.62185	solute carrier family 9 (sodium/hydrogen	8.31
	408687	AL110280	Hs.301152	Homo sapiens mRNA; cDNA DKFZp434F053 (tr	8.30
	427707	NM_005578	Hs.180398	LIM domain-containing preferred transloc	8.30
	459060	H89244	Hs.303627	heterogeneous nuclear ribonucleoprotein	8.30
70	451957	AI796320	Hs.10299	Homo sapiens cDNA FLJ13545 fs, clone PL	8.30
	443977	AL120986	Hs.150627	ESTs, Weakly similar to I38022 hypotheti	8.30
	457997	AA806618	Hs.209523	ESTs	8.30
	451934	AI540842	Hs.61082	ESTs	8.30
	404335			NA	8.30
75	445073	AW291389	Hs.13056	hypothetical protein FLJ13920	8.30
	431566	AF176012	Hs.260720	J domain containing protein 1	8.29
	446307	T50083	Hs.9094	ESTs	8.28
	423928	AA332680		gb:EST36768 Embryo, 8 week 1 Homo sapien	8.26
	436420	AA443966	Hs.31595	ESTs	8.25
80	426110	NM_002913	Hs.166563	replication factor C (activator 1) 1 (14	8.25
	442988	AI026130	Hs.131683	ESTs	8.25
	402408	NA		NA	8.24
	438707	L08239	Hs.5326	amino acid system N transporter 2; porcu	8.23
	425770	NM_014363	Hs.159492	spastic ataxia of Charlevoix-Saguenay (s	8.22

	448704	AW080932	Hs.249247	heterogeneous nuclear protein similar to	8.21
	452682	AA456193	Hs.9071	progesterone membrane binding protein	8.20
	411984	NM_005419	Hs.72988	signal transducer and activator of trans	8.20
	420018	U56387	Hs.94376	proprotein convertase subtilisin/kexin 1	8.20
5	437048	AA743240	Hs.91582	ESTs	8.20
	424653	AW977534	Hs.151469	calcium/calmodulin-dependent serine prot	8.20
	447066	BE167687	Hs.32163	ESTs	8.20
	425932	M81650	Hs.1968	semenogelin I	8.20
10	431819	AA515995	Hs.152334	ESTs	8.20
	431810	X67155	Hs.270845	kinesin-like 5 (mitotic kinesin-like pro	8.20
	459702	AJ204995		gb:an03c03.x1 Stratagene schizo brain S1	8.20
	406687	M31126	Hs.272620	pregnancy specific beta-1-glycoprotein 9	8.18
	413109	AW389845	Hs.110855	ESTs	8.17
	424720	M89907	Hs.152292	SWI/SNF related, matrix associated, acti	8.16
15	424335	AW021508	Hs.28170	ESTs	8.10
	453096	AW294631	Hs.11325	ESTs	8.10
	427738	NM_000318	Hs.180612	peroxisomal membrane protein 3 (35KD, Ze	8.10
	457796	AA913389	Hs.126691	ESTs	8.10
20	429340	N35938	Hs.199429	Homo sapiens mRNA; cDNA DKFZp434M2216 (f	8.10
	445165	AV652831		gb:AV652831 GLC Homo sapiens cDNA clone	8.08
	418048	W49670	Hs.56044	ESTs	8.06
	426269	H15302	Hs.168950	Homo sapiens mRNA; cDNA DKFZp568A1046 (f	8.04
	439451	AF086270	Hs.276554	heterochromatin-like protein 1	8.02
25	419559	Y07828	Hs.91096	ring finger protein	8.02
	409268	AA625304	Hs.188554	ESTs	8.00
	447207	AA442233	Hs.17731	hypothetical protein FLJ12892	8.00
	446977	AW863613	Hs.156798	ESTs	8.00
	424565	AW102723	Hs.75295	guanylate cyclase 1, soluble, alpha 3	8.00
30	407013	U35637		gb:Human nebulin mRNA, partial cds	7.99
	414523	AU076633	Hs.76353	serine (or cysteine) proteinase inhibito	7.98
	440637	AW900115	Hs.7309	Homo sapiens clone 23741 mRNA sequence	7.96
	417076	AW973454	Hs.238442	ESTs, Moderately similar to ALU7_HUMAN A	7.95
	425921	NM_007231	Hs.162211	solute carrier family 6 (neurotransmitte	7.94
	415585	R59946	Hs.184852	KIAA1553 protein	7.92
35	453331	AJ240665	Hs.8895	ESTs	7.92
	445527	W39694	Hs.83286	ESTs, Weakly similar to S14747 sphingomy	7.90
	417318	AW953937	Hs.12891	ESTs	7.90
	429393	AA383024	Hs.201603	Homo sapiens mRNA; cDNA DKFZp434D0917 (f	7.90
40	444769	AJ191650	Hs.221436	ESTs	7.90
	444272	AJ138596	Hs.154619	ESTs	7.90
	425264	AA353953	Hs.20369	ESTs, Weakly similar to gonadotropin ind	7.90
	412642	BE244598	Hs.809	hepatocyte growth factor (hepatopoietin A;	7.90
	453765	BE279901	Hs.35091	hypothetical protein FLJ10775	7.90
45	421558	AB011125	Hs.105749	KIAA0553 protein	7.90
	446444	AJ743737	Hs.24370	ESTs	7.90
	420000	AB035063	Hs.94262	p53-inducible ribonucleotide reductase s	7.86
	437237	BE513073		gb:601171435F1 NIH_MGC_15 Homo sapiens c	7.86
	409582	R27430	Hs.271565	ESTs	7.84
50	419235	AW470411	Hs.288433	neurotrophin	7.83
	439620	AAB38727	Hs.124405	ESTs, Weakly similar to A46010 X-linked	7.82
	441690	R81733	Hs.33106	ESTs	7.80
	417735	AA188175	Hs.82506	KIAA1254 protein	7.80
	441795	N58115	Hs.21137	AD024 protein	7.80
55	442992	AJ914699	Hs.13297	ESTs	7.80
	422554	AA312219	Hs.296338	ESTs	7.80
	423123	NM_012247	Hs.124027	SELENOPHOSPHATE SYNTHETASE ; Human selen	7.80
	428627	BE002993	Hs.187660	putative Rab5 GDP/GTP exchange factor ho	7.80
	429228	AJ553633	Hs.337139	ESTs	7.80
60	429399	AA452244	Hs.16727	ESTs	7.80
	438396	AJ683487	Hs.152213	wingless-type MMTV integration site fami	7.77
	455510	AA422029	Hs.143640	ESTs, Weakly similar to hyperpolarizatio	7.76
	429396	AW954598	Hs.201626	Homo sapiens clone 25015 mRNA sequence	7.75
	453439	AJ572438	Hs.32976	guanine nucleotide binding protein 4	7.75
65	410561	BE540255	Hs.6994	Homo sapiens cDNA: FLJ22044 fs, clone H	7.71
	442875	BE523003	Hs.23625	Homo sapiens clone TCCCTA00142 mRNA sequ	7.71
	426655	H05769	Hs.188757	Homo sapiens, clone MGC:5564, mRNA, comp	7.70
	413374	NM_001034	Hs.75319	ribonucleotide reductase M2 polypeptide	7.70
	404998			NA	7.70
70	418947	W52990	Hs.22860	ESTs	7.70
	427401	U20582	Hs.2149	actin like protein	7.70
	410748	BE383816	Hs.12532	chromosome 1 open reading frame 21	7.70
	426262	AJ792141	Hs.196270	folate transporter/carrier	7.70
	446955	AW613138	Hs.156747	ESTs	7.70
75	449199	AJ990122	Hs.196988	ESTs	7.70
	443212	AW269515	Hs.102500	hypothetical protein FLJ20481	7.70
	446155	AJ533695	Hs.159422	Homo sapiens cDNA FLJ13997 fs, clone Y7	7.70
	427164	AB037721	Hs.173871	KIAA1300 protein	7.70
	452627	AJ122843	Hs.184319	ESTs, Weakly similar to KIAA1006 protein	7.70
80	452588	AA889120	Hs.110637	homeo box A10	7.70
	451838	AW005866	Hs.193969	ESTs	7.67
	422956	BE545072	Hs.122579	hypothetical protein FLJ10461	7.66
	451227	R84429	Hs.151944	ESTs, Weakly similar to high-risk human	7.66
	450701	H39960	Hs.288467	Homo sapiens cDNA FLJ12280 fs, clone MA	7.65

	432695	D63480	Hs.278634	KIAA0146 protein	7.63
	447476	BE293466	Hs.20880	ESTs, Weakly similar to I38022 hypotheti	7.60
	447289	AW247017	Hs.36978	melanoma antigen, family A, 3	7.60
5	447505	AL049266	Hs.18724	Homo sapiens mRNA; cDNA DKFZp564F093 (tr	7.60
	423065	R96158	Hs.267130	Homo sapiens, clone MGC:5406, mRNA, comp	7.60
	437396	BE140396	Hs.21621	hypothetical protein DKFZp762O076	7.60
	450628	AW382884	Hs.204715	ESTs	7.60
	418995	H39599	Hs.294008	ESTs	7.60
10	416402	NM_000715	Hs.1012	complement component 4-binding protein, NA	7.60
	405545				7.60
	440866	A1703103	Hs.271360	hypothetical protein MGC16275	7.60
	421281	A1299139	Hs.17517	ESTs	7.60
	424634	NM_003613	Hs.151407	cartilage intermediate layer protein, nu	7.60
	421041	N36914	Hs.14691	ESTs, Moderately similar to I38022 hypot	7.60
15	453311	AW104911	Hs.126707	hypothetical protein FLJ11457	7.54
	453060	AW294092	Hs.21594	hypothetical protein MGC15754	7.50
	417655	AA780791	Hs.14014	hypothetical protein FLJ14813	7.50
	417531	NM_003157	Hs.1087	serine/threonine kinase 2	7.50
20	444099	D87432	Hs.10315	solute carrier family 7 (cationic amino	7.50
	407853	AA336797	Hs.40499	diclkopf (Xenopus laevis) homolog 1	7.50
	408920	AL120071	Hs.48998	fibronectin leucine rich transmembrane p	7.50
	447806	W03816	Hs.10432	ESTs, Weakly similar to I38022 hypotheti	7.48
	424748	AA346257	Hs.134933	ESTs	7.48
25	421089	AB037771	Hs.101799	KIAA1350 protein	7.46
	444856	A1888057	Hs.12097	ESTs	7.42
	447425	A1963747	Hs.18573	acylphosphatase 1, erythrocyte (common)	7.41
	418450	R84397	Hs.193651	ESTs, Weakly similar to alternatively sp	7.40
	434539	AW748078	Hs.214410	ESTs, Weakly similar to MUC2_HUMAN MUCIN	7.40
30	437036	A1571514	Hs.133022	ESTs	7.40
	414680	AA743331	Hs.272572	hemoglobin, alpha 2	7.40
	451815	AW974911	Hs.184793	Homo sapiens cDNA: FLJ21880 fs, clone H	7.40
	433577	AW007080	Hs.8817	ESTs	7.40
	453652	AW009640	Hs.28368	ESTs, Moderately similar to S65657 alpha	7.40
35	422665	AJ011812	Hs.119018	transcription factor NRF	7.40
	424188	AW954552	Hs.142634	zinc finger protein	7.40
	407300	AA102616		gb:zn43e07.s1 Stratagene HeLa cell s3 93	7.40
	431494	AA991355	Hs.298312	hypothetical protein DKFZp434A1315	7.40
	452958	AA883929	Hs.40527	ESTs	7.40
40	418763	AK000219	Hs.88367	hypothetical protein FLJ20212	7.40
	428279	AA425310	Hs.155766	ESTs, Weakly similar to A47582 B-cell gr	7.40
	449670	F07693	Hs.23869	Homo sapiens mRNA; cDNA DKFZp434K2172 (f	7.40
	449501	AA461509	Hs.293563	ESTs, Weakly similar to putative p150 [H	7.40
	438490	AW593272	Hs.301299	ESTs	7.40
45	410044	BE566742	Hs.58169	highly expressed in cancer, rich in leuc	7.40
	429509	AW614420	Hs.204354	ras homolog gene family, member B	7.38
	433393	AF038584	Hs.98074	itchy (mouse homolog) E3 ubiquitin prote	7.38
	434096	AW662958	Hs.75825	pleiomorphic adenoma gene-like 1	7.37
	425773	N21279	Hs.237749	ESTs	7.36
50	422755	T25365	Hs.119687	RAN binding protein 8	7.36
	410566	AA373210	Hs.43047	Homo sapiens cDNA FLJ13585 fs, clone PL	7.35
	412851	A1826502	Hs.106149	ESTs	7.35
	418661	NM_001949	Hs.1189	E2F transcription factor 3	7.35
	436246	AW450963	Hs.119991	ESTs	7.34
55	433159	AB035898	Hs.150587	kinesin-like protein 2	7.33
	444781	NM_014400	Hs.11950	GPI-anchored metastasis-associated prote	7.32
	453878	AW964440	Hs.19025	OC32	7.31
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	7.31
	402250	AV655272	Hs.20252	novel Ras family protein	7.31
60	439039	A1656707	Hs.48713	ESTs	7.30
	417976	BE565892	Hs.83077	interleukin 18 (interferon-gamma-inducin	7.30
	419438	AA991639	Hs.242413	hypothetical protein DKFZp434K1421	7.30
	417008	AW673606	Hs.80758	aspartyl-tRNA synthetase	7.30
	425420	BE536911	Hs.234545	hypothetical protein NUF2R	7.30
65	425889	M57414	Hs.161305	tachykinin receptor 2	7.29
	442969	AJ025499	Hs.132238	ESTs	7.26
	446360	N42553	Hs.267914	homolog of mouse transient receptor pote	7.25
	436022	AW517524	Hs.135201	NOD2 protein	7.25
	407183	AA358015		gb:EST66864 Fetal lung (H) Homo sapiens	7.24
70	429882	AA278898	Hs.225979	hypothetical protein similar to small G	7.24
	420120	AL049610	Hs.95243	transcription elongation factor A (SII)-	7.22
	400212	NA		NA	7.20
	431812	AA515902	Hs.130650	ESTs	7.20
	419481	A1879195	Hs.90606	15 kDa selenoprotein	7.20
75	447078	AW885727	Hs.301570	ESTs	7.20
	413200	AA127395	Hs.222414	ESTs	7.20
	411750	BE562258	Hs.71827	KIAA0112 protein; homolog of yeast ribos	7.20
	439901	N73885	Hs.124169	ESTs	7.20
	411815	AA156679	Hs.125790	leucine-rich repeat-containing 2	7.20
80	459279	AW814996		gb:MR1-ST0206-170400-024-h09 ST0206 Homo	7.20
	445263	H57646	Hs.42586	KIAA1560 protein	7.20
	413801	M62246	Hs.35406	ESTs, Highly similar to unnamed protein	7.20
	418407	AL044818	Hs.84928	nuclear transcription factor Y, beta	7.20
	452221	C21322	Hs.288057	hypothetical protein FLJ22242	7.20

	425202	AW962282	Hs.152049	ESTs, Weakly similar to I38022 hypotheti	7.20
	403764			NA	7.20
	416896	AJ752862	Hs.5638	KIAA1572 protein	7.20
5	416636	N32536	Hs.42645	ESTs	7.20
	428071	AF212848	Hs.182339	ets homologous factor	7.20
	450142	AW207469	Hs.24485	chondroitin sulfate proteoglycan 6 (bama	7.18
	451017	BE391847	Hs.181173	hypothetical protein MGC10771	7.17
	409759	N40285	Hs.81182	histamine N-methyltransferase	7.16
10	452448	AW182440	Hs.61389	ESTs, Weakly similar to unnamed protein	7.16
	427951	AJ826125	Hs.43546	ESTs	7.16
	407939	W05608	Hs.312679	ESTs, Weakly similar to A49019 dynein he	7.15
	419457	AA243146	Hs.205334	ESTs, Moderately similar to S23A_HUMAN P	7.12
	411769	AJ694575	Hs.27207	KIAA0982 protein	7.11
15	430355	NM_006219	Hs.239818	phosphoinositide-3-kinase, catalytic, be	7.10
	419511	AA429750	Hs.75113	general transcription factor IIIA	7.10
	409032	AW301807	Hs.297260	ESTs	7.10
	424539	L02911	Hs.150402	activin A receptor, type I	7.10
	439221	AA737106	Hs.32250	ESTs, Moderately similar to I78885 serin	7.10
20	430719	AA488988	Hs.293796	ESTs	7.10
	408020	AA127940	Hs.62781	ESTs	7.10
	420218	AW956037	Hs.286	ribosomal protein L4	7.10
	443487	AJ073491	Hs.269887	ESTs, Highly similar to KPBB_HUMAN PHOSP	7.10
	414865	AA157155	Hs.274414	hypothetical protein FLJ14457	7.10
25	428724	AL390128	Hs.191268	KIAA1530 protein	7.10
	413293	AL047483	Hs.302498	GTP-binding protein homologous to Saccha	7.10
	419126	AJ810144	Hs.135276	ESTs	7.09
	437044	AL035864	Hs.69517	cDNA for differentially expressed CO16 g	7.09
	433730	AK002135	Hs.3542	hypothetical protein FLJ11273	7.07
30	417381	AF164142	Hs.82042	solute carrier family 23 (nucleobase tra	7.07
	457019	AA421844	Hs.12830	hypothetical protein	7.07
	409697	AB018348	Hs.55947	KIAA0805 protein	7.06
	400977	NA		NA	7.06
	436668	AA831857	Hs.209071	ESTs	7.03
35	451684	AF216751	Hs.26813	CDA14	7.03
	404029			NA	7.02
	448719	AA033627	Hs.21858	trinucleotide repeat containing 3	7.02
	445577	N40696	Hs.137064	cytoplasmic polyadenylation element bind	7.00
	419647	AA348947	Hs.91816	hypothetical protein	7.00
40	442075	AW136928		gb:U1-H-B11-adt-d-08-0-U1.s1 NCI_CGAP_Su	7.00
	429598	AA811257	Hs.269710	ESTs	7.00
	450832	AW970602	Hs.105421	ESTs	7.00
	421389	AA531291	Hs.101064	Homo sapiens cDNA FLJ12777 fs, clone NT	7.00
	453931	AL121278	Hs.25144	ESTs	7.00
45	432343	NM_002960	Hs.2961	S100 calcium-binding protein A3	7.00
	452979	AW167599	Hs.232282	ESTs	7.00
	431696	AA259068	Hs.267819	protein phosphatase 1, regulatory (inhib	7.00
	413583	AL120806	Hs.5688	ESTs	7.00
	436758	AW977167	Hs.155272	ESTs	7.00
50	455944	BE160643		gb:PM1-HT0422-291299-002-f03 HT0422 Homo	6.98
	430302	AL137502	Hs.238679	Rag D protein	6.96
	437613	R19892	Hs.10267	MIL1 protein	6.96
	440524	R71264	Hs.16798	ESTs	6.95
	451047	AB022317	Hs.25887	sema domain, immunoglobulin domain (Ig),	6.93
55	450377	AB033091	Hs.74313	KIAA1265 protein	6.93
	457396	Z20964	Hs.323817	DKFZP547E1010 protein	6.93
	417393	R10484	Hs.82071	Cbp/p300-interacting transactivator, wit	6.92
	414417	BE299433	Hs.68533	KIAA1679 protein	6.92
	412248	AJ160873	Hs.69233	zinc finger protein	6.90
60	411003	AA181018	Hs.13056	hypothetical protein FLJ13920	6.90
	413833	Z15005	Hs.75573	centromere protein E (312kD)	6.90
	405696	NA		NA	6.90
	431689	AA305688	Hs.267695	UDP-Gal-beta-GlcNAc beta 1,3-galactosyltr	6.90
	414429	R51494	Hs.71818	ESTs	6.90
65	424841	AB001106	Hs.151413	glia maturation factor, beta	6.90
	418895	AA894638	Hs.14600	ESTs	6.90
	445900	AF070526	Hs.13429	Homo sapiens clone 24787 mRNA sequence	6.90
	446006	NM_004403	Hs.13530	deafness, autosomal dominant 5	6.90
	432038	AA524745	Hs.162110	ESTs	6.87
70	446610	AV659433	Hs.282984	ESTs, Weakly similar to I38022 hypotheti	6.86
	451286	AW139789	Hs.16370	Homo sapiens cDNA FLJ11652 fs, clone HE	6.86
	408915	NM_016651	Hs.48950	hepaticellular carcinoma novel gene-3 pro	6.85
	418934	T83845	Hs.191116	ESTs	6.82
	435143	R12375	Hs.194600	ESTs	6.82
75	442660	AW138174	Hs.130651	ESTs	6.82
	432729	AK000292	Hs.278732	hypothetical protein FLJ20285	6.81
	435990	AJ015862	Hs.131793	ESTs	6.80
	449062	AJ272268	Hs.22958	calcium channel, voltage-dependent, atph	6.80
	453688	AW381270	Hs.194110	hypothetical protein PRO2730	6.80
80	421476	AW953805	Hs.21887	ESTs	6.80
	430510	AW162916	Hs.241576	hypothetical protein PRO2577	6.80
	409045	AA635062	Hs.50094	Homo sapiens mRNA: cDNA DKFZp434O0515 (I	6.80
	410298	AJ693821	Hs.182185	ESTs	6.80
	420560	AW207748	Hs.59115	ESTs	6.80

	427752	AA470687	Hs.104772	ESTs	6.80
	414080	AA135257	Hs.47783	B aggressive lymphoma gene	6.80
	422420	U03398	Hs.1524	tumor necrosis factor (ligand) superfamily	6.80
5	416913	AW934714		gb:RC1-DT0001-031299-011-a11 DT0001 Homo	6.80
	426890	AA393167	Hs.41294	ESTs	6.80
	411773	NM_006799	Hs.72026	protease, serine, 21 (testisin)	6.80
	413328	Y15723	Hs.75295	guanylate cyclase 1, soluble, alpha 3	6.79
	437619	AW351491	Hs.334853	hypothetical protein FLJ23544	6.79
10	434267	AI206589	Hs.116243	ESTs	6.79
	419358	T78763	Hs.90063	neurocalcin delta	6.79
	435854	AJ278120	Hs.4996	putative ankyrin-repeat containing prote	6.78
	424925	NM_002432	Hs.153837	myeloid cell nuclear differentiation ant	6.77
	443184	AJ638728	Hs.131973	ESTs	6.77
	444484	AK002126	Hs.11260	hypothetical protein FLJ11264	6.77
15	429483	AA974832	Hs.128708	ESTs	6.78
	425605	BE544300	Hs.7076	KIAA1705 protein	6.76
	425045	AW953186	Hs.92400	ESTs	6.76
	438776	AW245243	Hs.334368	hypothetical protein MGC11257	6.75
20	458174	AA781530	Hs.127236	hypothetical protein FLJ12879	6.74
	445129	R39878	Hs.21394	ESTs	6.74
	435532	AW291488	Hs.117305	Homo sapiens, clone IMAGE:3682908, mRNA	6.73
	444442	AI149234	Hs.298423	ESTs, Moderately similar to I54374 gene	6.73
	431240	AA496790	Hs.179481	ESTs	6.72
25	422109	S73265	Hs.1473	gastrin-releasing peptide	6.70
	416655	AW968613	Hs.79428	BCL2/adenovirus E1B 19kD-interacting pro	6.70
	423811	AW299598	Hs.50895	homeo box C4	6.70
	443695	AW204099	Hs.337720	ESTs, Weakly similar to AF126780 1 retin	6.70
	420686	A950339	Hs.40782	ESTs	6.70
30	419574	AK001989	Hs.91165	hypothetical protein	6.70
	418269	AA808113	Hs.189025	ESTs	6.70
	434164	AW207019	Hs.148135	serine/threonine kinase 33	6.70
	408660	AA525775	Hs.292523	ESTs, Moderately similar to PC4259 ferri	6.70
	453370	AI470523	Hs.139336	ATP-binding cassette, sub-family C (CFTR	6.70
35	409506	NM_006153	Hs.54589	NCK adaptor protein 1	6.70
	454029	W05150	Hs.37034	homeo box A5	6.70
	413365	AW205188	Hs.124304	Homo sapiens cDNA FLJ14635 fs, clone NT	6.70
	447247	AW369351	Hs.287955	Homo sapiens cDNA FLJ13090 fs, clone NT	6.70
	426566	AF131836	Hs.170453	tropomodulin	6.70
40	446261	AA313893	Hs.306219	hypothetical protein FLJ12615 similar to	6.70
	408547	AA574291	Hs.57837	ESTs	6.70
	430458	AA479300	Hs.225706	ESTs, Weakly similar to I38022 hypotheti	6.70
	413627	BE182082	Hs.246973	ESTs	6.70
	410498	AA355749		gb:EST64459 Jurkat T-cells VI Homo sapie	6.70
45	434015	AA844518	Hs.300878	hypothetical protein FLJ13386	6.70
	453691	H12235	Hs.226505	ESTs	6.68
	415068	Z19448	Hs.131887	ESTs, Weakly similar to T24396 hypotheti	6.68
	415885	D79983	Hs.78894	KIAA0161 gene product	6.68
	405529	AW410458	Hs.5258	chromosome 11 open reading frame2	6.68
50	438242	AW241910	Hs.122254	ESTs, Weakly similar to JX0369 collagen	6.68
	442643	U82756	Hs.8551	PRP4/STK4WD splicing factor	6.67
	424802	X79201	Hs.153221	synovial sarcoma, translocated to X chro	6.67
	415007	BE244332	Hs.77770	adaptor-related protein complex 3, mu 2	6.67
	458714	R20916	Hs.202501	ESTs	6.66
55	414591	AI888490	Hs.65902	ESTs, Weakly similar to ALU8_HUMAN ALU S	6.65
	433260	AB040956	Hs.83575	KIAA1533 protein	6.65
	400268	NA		NA	6.63
	453180	N46243	Hs.110373	ESTs, Highly similar to T42626 secreted	6.62
	403973	NA		NA	6.60
60	436862	AI821940	Hs.264622	ESTs, Moderately similar to ALU8_HUMAN A	6.60
	428046	AW812795	Hs.155381	ESTs, Moderately similar to I38022 hypot	6.60
	453387	AI990741	Hs.252809	ESTs	6.60
	424084	AI940675	Hs.20914	hypothetical protein FLJ23056	6.60
	418444	AI902899	Hs.85155	butyrate response factor 1 (EGF-response	6.60
65	448172	N75278	Hs.135904	ESTs	6.60
	409571	AA504248	Hs.187585	ESTs	6.60
	423025	AA831267	Hs.12244	hypothetical protein FLJ20097	6.60
	430701	AI760833	Hs.293971	ESTs	6.60
	450373	AI915790	Hs.337282	ESTs	6.60
70	419384	AA490866	Hs.39429	ESTs	6.60
	429828	AB019494	Hs.225767	IDN3 protein	6.60
	441781	AI222880		gb:np40c06.x1 NCI_CGAP_Co8 Homo sapiens	6.60
	411048	AK001742	Hs.67991	hypothetical protein DKFZp434G0522	6.60
	421111	BE299047	Hs.43532	ESTs, Weakly similar to T20177 hypotheti	6.60
75	407424	AF120493		gb:Homo sapiens elastase 1 precursor (EL	6.59
	412396	AW947895		gb:PM1-MT0010-200300-001-110 MT0010 Homo	6.57
	416209	AA236776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	6.57
	406674	AA332152	Hs.288036	tRNA isopentenylpyrophosphate transferas	6.57
	400860			NA	6.56
80	457893	AA744292		gb:ny51d05.s1 NCI_CGAP_Pr18 Homo sapiens	6.55
	426108	AA622037	Hs.166468	programmed cell death 5	6.54
	422133	AW612779	Hs.333159	Homo sapiens laryngeal carcinoma related	6.54
	421044	AF061871	Hs.311736	Human DNA sequence from clone RP1-238D15	6.54
	414136	AA812434	Hs.119023	SMC2 (structural maintenance of chromoso	6.53



5	400351	AF060169	Hs.272369	Homo sapiens AS11 protein mRNA, partial	6.52
	413670	AB000115	Hs.75470	hypothetical protein, expressed in osteo	6.52
	410416	BE410072	Hs.63304	protein phosphatase methyltransferase-1	6.50
	419852	AW503756	Hs.286184	hypothetical protein DJ55102.5	6.50
	419677	N77342	Hs.21851	Homo sapiens cDNA FLJ12900 fs, clone NT	6.50
	431806	AF186114	Hs.270737	tumor necrosis factor (ligand) superfamily	6.50
	429774	AJ522215	Hs.50883	KIAA1804 protein	6.50
	428228	AA424352	Hs.210586	ESTs	6.50
10	418134	AA397769	Hs.86617	ESTs	6.50
	403859	NA		NA	6.50
	422704	AA972147	Hs.132275	ESTs	6.50
	416737	AF154335	Hs.79691	LIM domain protein	6.50
	429854	R55508	Hs.99472	ESTs	6.50
15	422672	X12784	Hs.119129	collagen, type IV, alpha 1	6.49
	453600	BE246211	Hs.119120	E3 ubiquitin ligase SMURF1	6.48
	454835	AW833763		gb:QV4-TT0008-130100-077-d10 TT0008 Homo	6.48
	434603	AF147384		gb:Homo sapiens full length insert cDNA	6.48
	408243	Y00787	Hs.624	Interleukin 8	6.48
20	429317	AA831552	Hs.268016	Homo sapiens cDNA: FLJ21243 fs, clone C	6.47
	451316	AJ770011	Hs.208310	ESTs	6.46
	448339	AL035920	Hs.20938	RNA binding motif, single stranded inter	6.46
	433423	BE407127	Hs.8997	heat shock 70kD protein 1A	6.44
	410358	AW975168	Hs.13337	ESTs, Weakly similar to unnamed protein	6.44
25	434025	AF114264	Hs.216381	Homo sapiens clone HH409 unknown mRNA	6.42
	440526	AJ832243	Hs.211471	ESTs	6.42
	432727	AA305233	Hs.278712	eukaryotic translation initiation factor	6.41
	433009	AA761668		gb:nz24c08.s1 NC1_CGAP_GCB1 Homo sapiens	6.40
	435782	NA9433	Hs.285737	Homo sapiens cDNA: FLJ20895 fs, clone A	6.40
30	415071	AK002197	Hs.284270	Homo sapiens cDNA FLJ11335 fs, clone PL	6.40
	407162	N83855	Hs.142634	zinc finger protein	6.40
	446152	AJ292036	Hs.150028	ESTs	6.40
	422828	AL133396	Hs.121281	prion protein 2 (dublet)	6.40
	418866	T65754		gb:yc11c07.s1 Stragene lung (937210) H	6.40
35	411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	6.40
	429039	AI524793	Hs.301897	ESTs	6.40
	447254	NM_004153	Hs.17908	origin recognition complex, subunit 1 (y	6.40
	435159	AA668879	Hs.116649	ESTs	6.40
	429625	AA455568	Hs.193814	ESTs	6.40
40	430180	AA331406	Hs.75456	A kinase (PRKA) anchor protein 10	6.40
	408420	NM_006915	Hs.44766	retinitis pigmentosa 2 (X-linked recessi	6.40
	426572	AB037783	Hs.170623	hypothetical protein FLJ11183	6.40
	449911	AJ262106	Hs.12653	ESTs	6.40
	440105	AA694010	Hs.6832	Homo sapiens clone 23809 mRNA sequence	6.40
45	440395	AA884412	Hs.216342	ESTs	6.37
	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotoxic)	6.37
	417771	AA804698	Hs.82547	retinoid acid receptor responder (lazar	6.36
	417092	H97508	Hs.181165	eukaryotic translation elongation factor	6.36
	412227	AW902282		gb:QV3-NN1023-260400-169-g10 NN1023 Homo	6.36
50	400845	NA		NA	6.36
	403546	NA		NA	6.36
	412345	AW938386		gb:PM4-DT0057-201299-002-G10 DT0057 Homo	6.35
	422186	AW962364	Hs.129051	ESTs	6.34
	426990	AL044315	Hs.173094	Homo sapiens mRNA for KIAA1750 protein,	6.34
55	417687	AI828596	Hs.250691	ESTs	6.33
	426223	AW977812	Hs.130391	ESTs	6.32
	417588	Z44510		gb:HSC22D091 normalized infant brain cDN	6.32
	432629	AW860548	Hs.280658	ESTs	6.31
	440495	AA887212	Hs.14161	hypothetical protein DKFZp434i1930	6.31
60	407771	AL138272	Hs.62713	ESTs	6.31
	417517	AF001176	Hs.82238	POP4 (processing of precursor, S. cerev	6.30
	431041	AA490967	Hs.197955	KIAA0704 protein	6.30
	445571	AL378000	Hs.158489	ESTs, Weakly similar to Z184_HUMAN ZINC	6.30
	433309	AA807060	Hs.126558	ESTs	6.30
65	415659	W27214	Hs.78547	zinc finger protein (clone 647)	6.30
	420271	AI954365	Hs.42892	ESTs	6.30
	426921	AA037145	Hs.172865	cleavage stimulation factor, 3' pre-RNA,	6.30
	400950	NA		NA	6.30
	429692	N48422	Hs.9977	ESTs, Weakly similar to B34087 hypothe	6.30
70	439813	AA846321	Hs.124501	ESTs	6.30
	449444	AW818436	Hs.23590	solute carrier family 16 (monocarboxylic	6.30
	453596	AA441838	Hs.62905	hypothetical protein FLJ14834	6.30
	446847	T51454	Hs.82845	Homo sapiens cDNA: FLJ21930 fs, clone H	6.30
	435820	AA700580	Hs.189000	ESTs	6.30
75	452576	AB023177	Hs.29900	KIAA0960 protein	6.30
	448924	AW450569	Hs.188399	ESTs	6.30
	424343	AW956360	Hs.4748	adenylate cyclase activating polypeptide	6.30
	412591	BE217736	Hs.292653	ESTs, Weakly similar to T26845 hypothe	6.30
	426642	AW068223	Hs.171581	ubiquitin C-terminal hydrolase UCH37	6.30
80	419088	AI538323	Hs.52620	integrin, beta 8	6.30
	401424	NA		NA	6.30
	412189	R60982	Hs.22581	ESTs	6.30
	435501	AW051819	Hs.129908	KIAA0591 protein	6.30
	408221	AA912183	Hs.47447	ESTs	6.28

	413943	AW294416	Hs.144587	Homo sapiens cDNA FLJ12581 fs, clone NT	6.28
	416845	H95279		gb:yu20h02.s1 Soares fetal liver spleen	6.27
	402732	NA		NA	6.26
5	413224	AJ732470	Hs.191157	ESTs, Weakly similar to ALU7_HUMAN ALU S	6.24
	415642	U19878	Hs.336224	transmembrane protein with EGF-like and	6.24
	449284	BE502240	Hs.38592	hypothetical protein FLJ23342	6.24
	419548	AW978142	Hs.326248	Homo sapiens cDNA: FLJ22071 fs, clone H	6.23
	453880	AJ803166	Hs.28462	ESTs, Weakly similar to I38022 hypotheti	6.22
10	422675	BE018517	Hs.119140	eukaryotic translation initiation factor	6.22
	413384	NM_000401	Hs.75334	exostoses (multiple) 2	6.21
	445584	AF217518	Hs.8360	PTD012 protein	6.21
	451065	AW295132	Hs.222231	ESTs, Weakly similar to granule cell mar	6.21
	420807	AA280627	Hs.57846	ESTs	6.20
15	421155	H87879	Hs.102267	lysyl oxidase	6.20
	441421	AA356792	Hs.334824	hypothetical protein FLJ14825	6.20
	440209	H05049	Hs.22269	neurexin 3	6.20
	408170	AW204516	Hs.31835	ESTs	6.20
	433590	N98410	Hs.48364	Homo sapiens regulator of G-protein sign	6.20
20	442008	AJ457814	Hs.270272	ESTs	6.20
	420617	AK001652	Hs.99423	ATP-dependent RNA helicase	6.20
	402343			NA	6.20
	432682	AJ376400	Hs.159588	ESTs	6.20
	452109	AJ525873	Hs.61164	hypothetical protein FLJ14909	6.20
25	429954	AJ918130	Hs.21374	ESTs	6.20
	417256	U94332	Hs.81791	tumor necrosis factor receptor superfam	6.20
	435525	AJ831297	Hs.123310	ESTs	6.20
	413604	R51767		gb:yg73g11.r1 Soares infant brain 1N1B H	6.20
30	425305	AA363025	Hs.155572	Human clone 23801 mRNA sequence	6.20
	443285	AJ301918	Hs.334264	ESTs	6.20
	446565	D13757	Hs.311	phosphoribosyl pyrophosphate amidotransf	6.20
	451027	AW519204	Hs.40808	ESTs	6.20
	452243	AL355715	Hs.28555	programmed cell death 9	6.19
	429782	NM_005754	Hs.220689	Ras-GTPase-activating protein SH3-domain	6.17
35	424060	X92108	Hs.138629	Hs.sapiens mRNA for subtelomeric repeat s	6.17
	432494	AA551060		gb:mk74R02.s1 NC1_CGAP_Sch1 Homo sapiens	6.16
	448186	AA262105	Hs.4094	Homo sapiens cDNA FLJ14208 fs, clone NT	6.14
	419638	N46504	Hs.91747	profilin 2	6.13
	445595	W25950	Hs.14512	DIPB protein	6.13
40	433036	AA574091	Hs.105964	ESTs	6.13
	457155	AL110243	Hs.187991	DKFZP564A122 protein	6.13
	443715	AJ583187	Hs.9700	cyclin E1	6.13
	422867	L32137	Hs.1584	cartilage oligomeric matrix protein (pse	6.12
45	453286	AA034319	Hs.29041	Homo sapiens cDNA FLJ14177 fs, clone NT	6.11
	424897	D63216	Hs.153684	frizzled-related protein	6.11
	429188	AB011171	Hs.198037	KIAA0599 protein	6.11
	434894	AW977850	Hs.23856	hypothetical protein MGC5297	6.10
	413339	AJ818080	Hs.194290	ESTs	6.10
	453685	AL110309		gb:DKFZp564L0278.r1 564 (synonym: Mbr2)	6.10
50	421195	BE464560	Hs.133017	ESTs	6.10
	453296	AA034413	Hs.62560	ESTs	6.10
	444985	AJ677737	Hs.28329	hypothetical protein FLJ14005	6.10
	423492	AF020761	Hs.129683	ubiquitin-conjugating enzyme E2D 1 (homo	6.10
	419841	BE005848	Hs.7326	ESTs	6.10
55	429190	H18650	Hs.92602	ESTs	6.10
	426116	AA868729	Hs.144694	ESTs	6.10
	451441	AA017601	Hs.84529	ESTs, Weakly similar to Z202_HUMAN ZINC	6.10
	401740			NA	6.10
	441953	H11695	Hs.322901	disruptor of silencing 10	6.10
60	401464	AF039241	Hs.9028	histone deacetylase 5	6.10
	405033			NA	6.10
	410743	AA089474	Hs.272153	ESTs	6.10
	454758	AW845266		gb:IL2-CT0031-160999-003-B08 CT0031 Homo	6.10
65	417728	AW138437	Hs.24790	KIAA1573 protein	6.10
	418553	T88964		gb:y97a07.r1 Soares fetal liver spleen	6.09
	431617	AK000738	Hs.264636	hypothetical protein FLJ20731	6.08
	455608	BE011437		gb:CM4-BN0220-080500-170-R03 BN0220 Homo	6.08
	450755	AA010984	Hs.159484	ESTs	6.07
	455217	AW867534		gb:MR0-SN0037-160400-004-e05 SN0037 Homo	6.07
70	437179	AA393508	Hs.300642	serologically defined colon cancer antig	6.06
	408622	AA056050	Hs.202577	Homo sapiens cDNA FLJ12166 fs, clone MA	6.06
	415308	F05251		gb:HSC04H101 normalized infant brain cDN	6.06
	428417	AK001699	Hs.184227	F-box only protein 21	6.05
	426501	AW043782	Hs.293616	ESTs	6.03
75	431077	AJ669133	Hs.115660	hypothetical protein FLJ12810	6.03
	403040			NA	6.02
	445704	AJ493742	Hs.165210	ESTs, Moderately similar to I38022 hypot	6.02
	415637	R25517		gb:yg44R01.r1 Soares infant brain 1N1B H	6.02
	427925	N51323	Hs.255935	Homo sapiens, clone IMAGE:3448993, mRNA	6.02
80	404702	NA		NA	6.02
	433183	AF231338	Hs.222024	transcription factor BMAL2	6.01
	437762	T78028	Hs.154679	synaptotagmin I	6.01
	443833	AJ654108	Hs.135125	ESTs	6.01
	422263	AA307639	Hs.129908	KIAA0591 protein	6.00

5	420909	AJ640551	Hs.88878	Homo sapiens cDNA: FLJ23536 fs, clone L	6.00
	407612	U26403	Hs.37142	aphrin-A5	6.00
	450715	AJ266484	Hs.31570	ESTs, Weakly similar to KIAA1324 protein	6.00
	453853	AL040600	Hs.188083	ESTs	6.00
	444188	AJ393165	Hs.699	peptidylprolyl isomerase B (cyclophilin)	6.00
	451813	NM_016117	Hs.27182	phospholipase A2-activating protein	6.00
	422505	AL120862	Hs.124165	ESTs	6.00
	420734	AW972872	Hs.293736	ESTs	6.00
10	455082	BE148180		gb:RC0-HT0232-211099-011-e04 HT0232 Homo	6.00
	444200	AA327113	Hs.149057	ESTs	6.00
	447432	AW958473	Hs.301957	nuix (nucleoside diphosphate linked moi	6.00
	419752	AA249573	Hs.152618	ESTs, Moderately similar to ZN91_HUMAN Z	6.00
	428412	AA428240	Hs.126083	ESTs	6.00
15	407790	AI027274	Hs.288941	Homo sapiens cDNA FLJ14866 fs, clone PL	6.00
	428945	AW192803	Hs.98974	ESTs, Weakly similar to S65824 reverse t	6.00
	431878	AA521207	Hs.270202	ESTs, Weakly similar to ALU4_HUMAN ALU S	6.00
	425282	AW163518	Hs.155485	huntinglin interacting protein 2	6.00
	401093			NA	6.00
20	411861	AW867875		gb:MR0-SN0040-050500-003-111 SN0040 Homo	6.00
	411800	N39342	Hs.103042	microtubule-associated protein 18	5.99
	446925	AW974605	Hs.176669	ESTs	5.98
	401708	NA		NA	5.98
	449894	AK001578	Hs.24129	CLLL7 protein	5.97
25	403278	NA		NA	5.96
	455212	AW866330		gb:QV4-SN0024-080400-167-e01 SN0024 Homo	5.96
	410116	AW630671	Hs.58636	squamous cell carcinoma antigen recogniz	5.96
	441271	AA927290	Hs.130482	ESTs	5.95
	404072			NA	5.95
30	431596	T34708	Hs.272927	Sec23 (S. cerevisiae) homolog A	5.94
	421622	AB037748	Hs.106204	KIAA1327 protein	5.93
	441300	R35063	Hs.181536	ESTs	5.92
	445517	AF208855	Hs.12830	hypothetical protein	5.91
	429559	AI985345	Hs.26425	ESTs	5.91
35	443767	BE562136	Hs.9736	proteasome (prosome, macropain) 26S subu	5.91
	440510	H08427	Hs.309165	ESTs, Weakly similar to ISHUSS protein d	5.90
	414727	BE468904		gb:h228f03.x1 NCI_CGAP_GC6 Homo sapiens	5.90
	451686	AA059248	Hs.110283	ESTs	5.90
	438032	BE045624	Hs.152992	ESTs	5.90
40	450470	Z75330	Hs.288148	stromal antigen 1	5.90
	430533	AA480895	Hs.201552	ESTs, Weakly similar to T17288 hypotheti	5.90
	432662	AL049314	Hs.280700	ESTs	5.90
	451742	T77609	Hs.117970	ankyrin 2, neuronal	5.90
	431217	NM_013427	Hs.250830	Rho GTPase activating protein 6	5.90
45	412537	AL031778	Hs.797	nuclear transcription factor Y, alpha	5.90
	447233	AW246333	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	5.90
	410804	U64820	Hs.66521	Machado-Joseph disease (spinocerebellar	5.90
	452619	AW298597	Hs.61884	Homo sapiens, clone IMAGE:4298026, mRNA,	5.90
	433865	N29862	Hs.44104	ESTs	5.90
50	453403	BE466639	Hs.61779	Homo sapiens cDNA FLJ13591 fs, clone PL	5.90
	448743	AB032962	Hs.21898	KIAA1138 protein	5.90
	447153	AA805202	Hs.315562	ESTs	5.90
	425793	AA363946	Hs.20969	ESTs	5.90
	404632			NA	5.90
55	446364	AB006624	Hs.14912	KIAA0286 protein	5.90
	452240	AI591147	Hs.61232	ESTs	5.90
	410424	AA084984		gb:zn11a08.r1 Stratagene hNT neuron (937	5.90
	404170			NA	5.89
60	458390	AI792585	Hs.133272	ESTs, Weakly similar to ALUC_HUMAN IIII	5.89
	408296	AL117452	Hs.44155	DKFZP586G1517 protein	5.88
	444406	AI147237	Hs.300697	immunoglobulin heavy constant gamma 3 (G	5.87
	413894	BE177983		gb:RC3-HT0600-230300-021-g10 HT0600 Homo	5.87
	453922	AF053308	Hs.36708	budding uninhibited by benzimidazoles 1	5.86
	446700	AW206257	Hs.156328	Human DNA sequence from clone RP11-145L2	5.86
65	443377	AI792547	Hs.133292	ESTs	5.86
	419162	AA234591	Hs.304123	ESTs	5.85
	436608	AA628980	Hs.192371	down syndrome critical region protein DS	5.84
	428650	AI560456	Hs.107319	ESTs	5.84
	437410	AW023340	Hs.14880	ESTs	5.84
70	428303	AW974476	Hs.183601	regulator of G-protein signalling 16	5.84
	401004			NA	5.83
	414504	AW069181	Hs.115175	sterile-alpha motif and leucine zipper c	5.83
	410979	BE151480		gb:RC0-HT0295-071199-011-e01 HT0295 Homo	5.82
	424576	BE154142	Hs.96833	ESTs	5.82
75	439352	BE614347	Hs.169615	hypothetical protein FLJ20989	5.81
	423057	AW961597	Hs.130816	ESTs, Moderately similar to I38022 hypot	5.80
	429250	H56585	Hs.198308	tryptophan rich basic protein	5.80
	413048	M93221	Hs.75182	mannose receptor, C type 1	5.80
	451367	AA923729	Hs.26322	cell cycle related kinase	5.80
80	418647	AA226188		gb:nc26a07.s1 NCI_CGAP_Py1 Homo sapiens	5.80
	421589	AW954177	Hs.82919	cutlin 2	5.80
	427969	NM_001963	Hs.2230	epidermal growth factor (beta-urogastron	5.80
	451406	AI694320	Hs.6295	ESTs, Weakly similar to T17248 hypotheti	5.80
	436096	H55931	Hs.269582	ESTs	5.80

5	443353	A1052659	Hs.133255	ESTs	5.80
	457244	AA581385	Hs.162473	ESTs, Weakly similar to I38022 hypothe	5.80
	407746	AK001862	Hs.38114	hypothetical protein FLJ11100	5.80
	440688	AW404591	Hs.147440	ESTs, Weakly similar to Z192_HUMAN ZINC	5.80
	445745	AB007924	Hs.13245	KIAA0455 gene product	5.80
	405637	NA	NA	NA	5.80
	415293	R49462	Hs.106541	ESTs	5.80
	440404	A1015881	Hs.324527	mitochondrial ribosomal protein S5	5.80
10	442227	AW771958	Hs.175437	ESTs, Moderately similar to PC4259 term	5.80
	423395	AA326613		gb:EST29922 Cerebellum II Homo sapiens c	5.80
	410555	U92649	Hs.64311	a disintegrin and metalloproteinase doma	5.80
	416000	R62342	Hs.79856	ESTs, Weakly similar to S65657 alpha-1C-	5.80
	422108	AA297914	Hs.111749	postmeiotic segregation increased (S. ce	5.80
	430818	A1311928		gb:q089h04.x1 NCI_CGAP_Kid5 Homo sapiens	5.80
15	444749	A1190672	Hs.65926	ESTs	5.80
	417515	L24203	Hs.82237	ataxia-telangiectasia group D-associated	5.79
	456192	D84109	Hs.80248	RNA-binding protein gene with multiple s	5.78
	411253	AW833897		gb:OVD-TT0009-111199-055-b07 TT0009 Homo	5.78
20	417219	AW973473	Hs.220938	ESTs	5.78
	409450	AW628650	Hs.61260	hypothetical protein FLJ13164	5.76
	412013	AA400753	Hs.43761	ESTs, Weakly similar to A46010 X-linked	5.76
	425566	AW162943	Hs.250618	UL16 binding protein 2	5.75
	417877	A1025829	Hs.86320	ESTs	5.75
25	437114	AA836641	Hs.163085	ESTs	5.75
	421238	AB033101	Hs.102796	Homo sapiens cDNA FLJ10708 fs, clone NT	5.74
	428959	AF100779	Hs.194680	WNT1 inducible signaling pathway protein	5.73
	415209	F00183	Hs.172004	tin	5.73
	429922	Z97630	Hs.226117	H1 histone family, member 0	5.72
30	420022	AA256253	Hs.120817	ESTs	5.71
	431485	BE621320	Hs.257486	hypothetical protein FLJ20062	5.71
	424304	NM_001395	Hs.144879	dual specificity phosphatase 9	5.71
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	5.71
	438085	R52518	Hs.7957	ESTs	5.70
35	444379	N99035	Hs.222657	ESTs	5.70
	401348	NA	NA	NA	5.70
	428878	AA436884	Hs.48926	ESTs	5.70
	422564	A1148006	Hs.222120	ESTs	5.70
	452560	BE077084	Hs.336432	ESTs	5.70
40	408384	BE144344	Hs.7589	ESTs, Weakly similar to A46010 X-linked	5.70
	409948	AA078643		gb:7P08801 Chromosome 7 Placental cDNA L	5.70
	421166	AA305407	Hs.102308	potassium inwardly-rectifying channel, s	5.70
	439231	AW581935	Hs.141480	Homo sapiens mRNA; cDNA DKFZp434N079 (fr	5.70
	439203	AA448930	Hs.8453	KIAA1587 protein	5.70
45	442029	AW956698	Hs.14456	neural precursor cell expressed, develop	5.70
	451922	BE463995	Hs.211033	ESTs	5.70
	407808	AA663559	Hs.279789	histone deacetylase 3	5.70
	428161	M96954	Hs.182741	TIA1 cytotoxic granule-associated RNA-bi	5.70
	413430	R22479	Hs.167073	Homo sapiens cDNA FLJ13047 fs, clone NT	5.70
50	428223	AA424313	Hs.98402	ESTs	5.70
	427972	AA864870	Hs.181304	putative gene product	5.70
	416283	NM_005429	Hs.79141	vascular endothelial growth factor C	5.70
	416319	A1815601	Hs.79197	CD83 antigen (activated B lymphocytes, i	5.70
	458044	AW979114	Hs.326135	ESTs	5.70
55	432911	AW807634	Hs.279799	putative zinc finger protein NY-REN-34 a	5.70
	411643	A1924519	Hs.192570	hypothetical protein FLJ22028	5.70
	408867	AA437199	Hs.656	cell division cycle 25C	5.70
	428679	AA431765		gb:zw80c03.s1 Soares_testis_NHT Homo sap	5.70
	428822	W28418	Hs.30715	potassium voltage-gated channel, Isk-rel	5.70
60	409570	AW418720	Hs.167583	ESTs	5.70
	457441	BE467737	Hs.146125	ESTs	5.70
	409101	NM_004297	Hs.50612	guanine nucleotide binding protein (G pr	5.70
	420192	AA256281	Hs.105040	ESTs	5.69
	423582	BE000831	Hs.23837	Homo sapiens cDNA FLJ11812 fs, clone HE	5.69
65	454511	AW948146		gb:RCO-MT0013-280300-031-e02 MT0013 Homo	5.68
	419586	A1088485	Hs.144759	ESTs, Weakly similar to I38022 hypothe	5.67
	416777	AF146760	Hs.79844	DKFZP564M1416 protein	5.67
	435849	BE305242	Hs.16098	claudin 2	5.67
	457892	AA744389		gb:ny51e10.s1 NCI_CGAP_Pr18 Homo sapiens	5.66
70	450191	AW137243	Hs.222446	ESTs	5.66
	438653	AW188099	Hs.131813	ESTs	5.66
	422910	A1269508	Hs.121591	Human DNA sequence from PAC 257A7 on chr	5.66
	453694	AW504918	Hs.258208	Homo sapiens, clone MGC:15605, mRNA, com	5.66
	445302	AK001537	Hs.12488	hypothetical protein FLJ10675	5.66
75	446080	A1221741	Hs.117777	ESTs	5.65
	425474	Z48054	Hs.158084	peroxisome receptor 1	5.65
	432542	AW083920	Hs.16098	claudin 2	5.65
	446983	AA157484	Hs.97199	complement component C1q receptor	5.65
	420898	AB002379	Hs.100113	KIAA0381 protein	5.65
80	401372			NA	5.64
	428541	A1862570	Hs.299214	Homo sapiens, clone IMAGE:2822295, mRNA,	5.63
	426249	F05422	Hs.168352	nucleoporin-like protein 1	5.63
	459705	BE082764	Hs.270252	ESTs, Weakly similar to androgen recepto	5.63
	451863	AL120634	Hs.305923	ATPase, Ca <sup>++</sup> transporting, plasma membra	5.62

	426316	NM_002430	Hs.268515	meningioma (disrupted in balanced translocation)	5.62
	401183			NA	5.62
	426029	AW294138	Hs.255277	ESTs	5.61
	443462	AI064690	Hs.171176	ESTs	5.61
5	447102	BE167434	Hs.98471	ESTs, Weakly similar to T18712 hypothetical	5.60
	419150	T29618	Hs.89640	TEK tyrosine kinase, endothelial (venous)	5.60
	444577	AI207721	Hs.11393	RAD51 (S. cerevisiae) homolog C	5.60
	423605	AF047826	Hs.129887	cadherin 19, type 2	5.60
10	413447	AW969388	Hs.10450	Homo sapiens cDNA: FLJ22063 fs, clone H	5.60
	442857	AJ949952	Hs.49397	ESTs	5.60
	424296	AJ631874	Hs.155140	casein kinase 2, alpha 1 polypeptide	5.60
	430679	R44428	Hs.22801	ESTs	5.60
	449358	AA001229	Hs.131436	ESTs	5.60
	418348	AI537167	Hs.96322	hypothetical protein FLJ23560	5.60
15	433133	AB027249	Hs.104741	PDZ-binding kinase; T-cell originated protein	5.60
	444059	R69743	Hs.116774	integrin, alpha 1	5.60
	438157	AW137011	Hs.49576	ESTs	5.60
	428233	AJ358831	Hs.20578	ESTs	5.60
20	434265	AA846811	Hs.130554	Homo sapiens cDNA: FLJ23089 fs, clone L	5.60
	451652	AA018968	Hs.133538	ESTs	5.59
	422762	AL031320	Hs.119976	Human DNA sequence from clone RP1-20N2 o	5.59
	447591	AI675417	Hs.282855	ESTs	5.58
	417958	AA767382	Hs.193417	ESTs	5.57
	438146	Z36842	Hs.57548	ESTs	5.57
25	413595	AW235215	Hs.16145	ESTs	5.57
	422406	AF025441	Hs.116206	Opa-interacting protein 5	5.56
	420529	D25259	Hs.318844	ESTs, Moderately similar to I54374 gene	5.56
	439582	W79161	Hs.118327	Homo sapiens cDNA FLJ11522 fs, clone HE	5.56
30	408744	AW806177		gb:MR1-UM0108-130400-003-d04 UM0108 Homo	5.56
	447230	AW972147	Hs.101395	hypothetical protein MGC11352	5.54
	428856	AA436735	Hs.183171	hypothetical protein FLJ22002	5.54
	446813	AA971436	Hs.16218	KIAA0903 protein	5.53
	451424	AI862026	Hs.302810	Novel human gene mapping to chromosome 20	5.53
35	410516	BE537917	Hs.90034	hypothetical protein FLJ21916	5.53
	453994	BE180964	Hs.165590	ribosomal protein 613	5.53
	435583	AA767714	Hs.291627	ESTs	5.52
	431585	BE242803	Hs.262823	hypothetical protein FLJ10326	5.51
	408512	AB011084	Hs.48924	KIAA0512 gene product: ALEX2	5.51
40	427968	R97130	Hs.189699	ESTs	5.51
	433611	AW327692	Hs.3446	mitogen-activated protein kinase kinase	5.51
	401244			NA	5.50
	410784	AW803201		gb:IL2-UM0077-070500-080-E06 UM0077 Homo	5.50
	434006	AF113688		gb:Homo sapiens clone FLB4630	5.50
45	425650	NM_001944	Hs.1925	desmoglein 3 (pemphigus vulgaris antigen)	5.50
	427507	AF240467	Hs.179152	toll-like receptor 7	5.50
	423268	BE386898	Hs.131162	ESTs, Weakly similar to ALU5_HUMAN ALU S	5.50
	405065	NA		NA	5.50
50	444302	AI140115	Hs.225130	ESTs	5.50
	418183	NM_001772	Hs.83731	CD33 antigen (gp87)	5.50
	435586	AI279137	Hs.151498	ESTs	5.50
	438279	AA805166	Hs.154762	HIV-1 rev binding protein 2	5.50
	427189	HB2453	Hs.5635	ESTs	5.50
	415263	AA948033	Hs.130853	ESTs	5.50
55	441818	AI630451	Hs.7976	KIAA0332 protein	5.50
	407834	AW084991	Hs.26100	ESTs	5.50
	404012	NA		NA	5.50
	449932	AI675444	Hs.263024	ESTs	5.50
60	423760	AA775891	Hs.191980	ESTs	5.50
	431576	M76665	Hs.275215	hydroxysteroid (11-beta) dehydrogenase 1	5.50
	423172	R15652		gb:HM503-F Adult heart, Clontech Homo sa	5.50
	422295	AF051151	Hs.114408	toll-like receptor 5	5.50
	429044	AI261490	Hs.145527	ESTs	5.50
	433280	AA581404	Hs.289037	Homo sapiens cDNA FLJ14135 fs, clone MA	5.50
65	414323	NM_014759	Hs.334688	KIAA0273 gene product	5.50
	405511	NA		NA	5.49
	444665	BE613126	Hs.47783	B aggressive lymphoma gene	5.49
	434434	AA633516	Hs.157201	ESTs	5.48
	421997	R66740	Hs.110613	KIAA0220 protein	5.47
70	410276	AI554545	Hs.68301	ESTs	5.47
	435887	AA954229	Hs.114052	ESTs	5.47
	453837	AL138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	5.47
	409617	BE003760	Hs.55209	Homo sapiens mRNA; cDNA DKFZp434K0514 (f	5.47
	430387	AW372684	Hs.240770	nuclear cap binding protein subunit 2, 2	5.47
75	401629	NA		NA	5.46
	433071	BE150229	Hs.281564	retinal outer segment membrane protein 1	5.46
	458247	R14439	Hs.209194	ESTs	5.46
	418049	AA211467	Hs.190488	Homo sapiens, Similar to nuclear localiz	5.45
	418247	R55174		gb:yg87h04.r1 Soares infant brain 1N1B H	5.45
80	453716	AA037675	Hs.152675	ESTs	5.44
	431157	AI823969	Hs.132678	ESTs	5.44
	426873	AI190540	Hs.131092	ESTs	5.43
	437092	AA744292		gb:ny51d05.s1 NCI_CGAP_Pr18 Homo sapiens	5.42
	445782	AW407872	Hs.315367	Homo sapiens, Similar to hypothetical pr	5.42

	447393	AI377458	Hs.158831	EST	5.42
	425283	AA354338	Hs.131100	ESTs	5.42
	401208	NA		NA	5.42
5	430536	AI809163	Hs.9908	nitrogen fixation cluster-like	5.42
	405523			NA	5.42
	409012	AL117435	Hs.49725	DKFZP434I216 protein	5.41
	429803	W81489	Hs.223025	RAB31, member RAS oncogene family	5.41
	436982	AB018305	Hs.5378	spondin 1, (I-spondin) extracellular mat	5.40
10	422892	AA888176	Hs.121553	hypothetical protein FLJ20641	5.40
	456027	BE327387	Hs.13913	KIAA1577 protein	5.40
	411897	AW875066	Hs.326876	Homo sapiens SOX8 mRNA, complete cds	5.40
	449689	AF28421	Hs.23889	DKFZP564A032 protein	5.40
	432865	AI753709	Hs.152484	ESTs, Weakly similar to I38022 hypotheti	5.40
15	408248	AW854832		gb:QV2-CT0261-201099-011-005 CT0261 Homo	5.40
	418516	NM_006218	Hs.85701	phosphoinositide-3-kinase, catalytic, al	5.40
	423289	N77774		gb:y283e01.r1 Soares_multiple_sclerosis_	5.40
	453365	AA035211	Hs.17404	ESTs	5.40
	406465			NA	5.40
20	441858	AW173339	Hs.135665	ESTs	5.40
	432507	BE391093	Hs.324567	ESTs	5.40
	440570	AI205712	Hs.125998	ESTs	5.40
	445062	AI339915	Hs.44324	ESTs	5.40
	421639	NM_012082	Hs.106309	Friend of GATA2	5.40
25	410406	AI969703	Hs.1466	glycerol kinase	5.40
	418939	AW630803	Hs.89497	lamin B1	5.40
	426010	AA136563	Hs.1975	hypothetical protein FLJ21007	5.40
	400250	NA		NA	5.40
	424650	AW576156	Hs.250824	Homo sapiens cDNA: FLJ23435 fis, clone H	5.40
30	414998	NM_002543	Hs.77729	oxidised low density lipoprotein (lectin	5.39
	433384	AI021992	Hs.124244	ESTs	5.38
	428781	AF164799	Hs.193384	putative 28 kDa protein	5.38
	438150	AA037534	Hs.79059	transforming growth factor, beta recepto	5.38
	400639			NA	5.38
35	426485	NM_006207	Hs.170040	platelet-derived growth factor receptor-	5.37
	424205	AA336825		gb:EST41732 Endometrial tumor Homo sapie	5.36
	459596	H29554	Hs.113871	ESTs	5.36
	408234	AW993358	Hs.285814	sprouty (Drosophila) homolog 4	5.36
	414547	T47770	Hs.191483	ESTs	5.35
40	419851	AA287987	Hs.13477	ESTs, Weakly similar to 1207289A reverse	5.35
	411945	AL033527	Hs.92137	v-myc avian myelocytomatosis viral onco	5.34
	425764	AW996009	Hs.112572	Homo sapiens cDNA FLJ14130 fis, clone MA	5.34
	405352			NA	5.33
	448030	N30714	Hs.325960	membrane-spanning 4-domains, subfamily A	5.32
45	424284	BE541008	Hs.6193	hypothetical protein FLJ14590	5.32
	427741	AW753185	Hs.180628	dynamitin 1-like	5.31
	426021	AW770897	Hs.34392	ESTs, Weakly similar to I38022 hypotheti	5.31
	442186	AA984083	Hs.269746	ESTs, Weakly similar to T03306 PSD-95/SA	5.30
	437319	BE410958	Hs.56406	Homo sapiens cDNA FLJ13549 fis, clone PL	5.30
	405287	NA		NA	5.30
50	427032	AF012023	Hs.173274	Integrin cytoplasmic domain-associated p	5.30
	415371	R15239		gb:y89b02.r1 Soares infant brain 1N18 H	5.30
	420024	AA252905	Hs.194477	E3 ubiquitin ligase SMURF2	5.30
	434408	AI031771	Hs.132586	ESTs	5.30
55	434739	AA804487	Hs.144130	ESTs	5.30
	421327	AA837295	Hs.188802	ESTs	5.30
	453058	AW612293	Hs.288684	Homo sapiens cDNA FLJ11750 fis, clone HE	5.30
	448776	BE302464	Hs.30057	MRS2 (S. cerevisiae)-like, magnesium hom	5.30
	417845	AL117461	Hs.82719	Homo sapiens mRNA: cDNA DKFZp586F1822 (f	5.30
60	430264	AA470519		gb:nc71f10.s1 NCI_CGAP_Pr1 Homo sapiens	5.30
	411402	BE297855	Hs.69855	NRAS-related gene	5.30
	419220	AA811938	Hs.291759	ESTs	5.30
	407995	AI094748	Hs.100134	hypothetical protein FLJ12787	5.30
	459256	AW967468	Hs.99821	hypothetical protein FLJ14547	5.30
65	452449	AW068658	Hs.20943	ESTs	5.30
	430366	AI057368	Hs.105575	ESTs	5.30
	434360	AW015415	Hs.127780	ESTs	5.30
	422560	F11469	Hs.118281	zinc finger protein 266	5.29
	441704	AA58766	Hs.201888	ESTs	5.29
70	443635	AI080230	Hs.134214	ESTs	5.29
	434342	AI791138	Hs.116768	ESTs	5.29
	423409	NM_006466	Hs.128207	polymerase (RNA) III (DNA directed) (39k	5.29
	449000	U69560	Hs.3826	kelch-like protein C3IP1	5.29
	452381	H23329	Hs.290880	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.29
75	409068	AW236991	Hs.102495	ESTs, Moderately similar to I38022 hypot	5.29
	434860	AA932386	Hs.292667	ESTs	5.28
	408096	BE250162	Hs.83765	dihydrofolate reductase	5.28
	418036	Z37976	Hs.83337	latent transforming growth factor beta b	5.28
	435443	AI248674	Hs.14295	ESTs	5.26
80	414269	AA298489	Hs.303171	olfactory receptor, family 51, subfamily	5.26
	408371	AF161545	Hs.278883	hypothetical protein	5.26
	401205	NA		NA	5.26
	450904	R07118	Hs.189924	ESTs	5.26
	416351	H49704	Hs.173522	ESTs	5.26

	426524	AA380611	Hs.163841	ESTs	5.25
	412901	AJ127359	Hs.289088	heat shock 90kD protein 1, alpha	5.25
	452487	AW207659	Hs.6630	Homo sapiens cDNA FLJ13329 fs, clone OV	5.24
5	444825	AW167613	Hs.248	mitogen-activated protein kinase kinase	5.24
	412953	Z45794	Hs.238809	ESTs	5.24
	404117	NA	NA	NA	5.22
	427956	AL046175	Hs.108169	Homo sapiens mRNA; cDNA DKFZp586C1619 (I	5.22
	421787	AA227068	Hs.108301	nuclear receptor subfamily 2, group C, m	5.22
10	437255	R58970	Hs.9887	ESTs	5.22
	424697	AL136169	Hs.250708	CAAX box 1	5.20
	449771	AI668702	Hs.54978	ESTs	5.20
	432193	AA372264	Hs.273193	hypothetical protein FLJ10706	5.20
	438885	AI886558	Hs.184987	ESTs	5.20
15	407182	AA312551	Hs.230157	ESTs	5.20
	452150	W42490	Hs.260844	ESTs	5.20
	419680	AA249720	Hs.59335	ESTs	5.20
	438940	AF075045	Hs.271609	ESTs	5.20
	405382	NA	NA	NA	5.20
20	449370	AK002114	Hs.23495	hypothetical protein FLJ11252	5.20
	442353	BE378594	Hs.49136	ESTs, Moderately similar to ALU7_HUMAN A	5.20
	409331	M36634	Hs.53973	vasoactive intestinal peptide	5.20
	415397	H10818		gb:mp0410.r1 Soares infant brain 1N18 H	5.20
	406735	AA603092		gb:mp37ad1.s1 NCI_CGAP_Lu1 Homo sapiens	5.20
25	418489	U76421	Hs.85302	adenosine deaminase, RNA-specific, B1 (h	5.20
	431480	AA837274	Hs.257005	hypothetical protein FLJ20837	5.20
	425523	AB007948	Hs.158244	KIAA0479 protein	5.20
	425673	R70318	Hs.339730	ESTs	5.20
	439267	AA287747	Hs.173012	ESTs, Weakly similar to A46010 X-linked	5.20
30	457030	AI301740	Hs.173381	dihydropyrimidinase-like 2	5.20
	424638	AI472106	Hs.49303	Homo sapiens cDNA FLJ11663 fs, clone HE	5.20
	454434	AA083558	Hs.261286	ESTs	5.20
	448336	R53848	Hs.44978	ESTs	5.20
	429534	AW976987	Hs.163327	ESTs, Weakly similar to 2109260A B cell	5.20
35	434803	AW974640	Hs.303413	ESTs	5.20
	403199	NA	NA	NA	5.20
	435225	AJ021912	Hs.187983	ESTs	5.20
	451664	AA889081	Hs.153952	5' nucleotidase (CD73)	5.20
	440385	AA884283	Hs.192136	ESTs	5.20
40	432328	AI572739	Hs.195471	6-phosphofructo-2-kinase/fructose-2,6-bi	5.20
	400484	NA	NA	NA	5.20
	425757	AA363171		gb:EST72986 Ovary II Homo sapiens cDNA 5	5.19
	449841	AI671502	Hs.199602	ESTs	5.19
	420303	AA258282	Hs.278436	KIAA1474 protein	5.19
45	429687	AI675749	Hs.211608	nucleoporin 153kD	5.19
	453345	AA302862	Hs.90063	neurocalcin delta	5.18
	447499	AW262580	Hs.147674	protocadherin beta 16	5.18
	404913	NA	NA	NA	5.18
	405114	NA	NA	NA	5.18
50	431117	AF003522	Hs.250500	delta (Drosophila)-like 1	5.18
	411995	W49701	Hs.29667	ESTs	5.17
	401738	NA	NA	NA	5.17
	425250	AA353496	Hs.269762	ESTs, Weakly similar to A47582 B-cell gr	5.16
	454388	AA630905	Hs.333300	hypothetical protein FLJ14026	5.16
55	449032	AA045573	Hs.22900	nuclear factor (erythroid-derived 2)-lik	5.16
	443646	AI085198	Hs.164226	ESTs	5.15
	436032	AA150797	Hs.109276	latexin protein	5.15
	456896	M97639	Hs.155585	receptor tyrosine kinase-like orphan rec	5.15
	433672	BE281165	Hs.288038	TLS-associated serine-arginine protein 1	5.15
60	432826	X75363	Hs.250770	ACO for serine protease homologue	5.14
	439441	W67993	Hs.323135	ESTs	5.14
	400205	NA	NA	NA	5.14
	430854	AW440369	Hs.47026	ESTs	5.14
	408771	AW732573	Hs.47584	potassium voltage-gated channel, delayed	5.14
65	456804	AI421645	Hs.139851	caveolin 2	5.14
	424690	BE538356	Hs.151777	eukaryotic translation initiation factor	5.13
	449210	AI635363	Hs.197636	ESTs	5.12
	419013	T90378	Hs.14463	ESTs	5.12
	425843	BE313280	Hs.159627	death associated protein 3	5.12
70	422545	X02761	Hs.287820	fibronectin 1	5.12
	424785	R23519	Hs.6126	hypothetical protein dJ1141E15.2	5.11
	442833	AA328153	Hs.88201	ESTs, Weakly similar to A Chain A, Cryst	5.10
	422411	AW749443	Hs.22511	ESTs	5.10
	457565	BE294029	Hs.279903	Ras homolog enriched in brain 2	5.10
75	437722	AW292947	Hs.122872	ESTs, Weakly similar to JU0033 hypotheri	5.10
	446893	AI610818	Hs.7110	ESTs	5.10
	401581	NA	NA	NA	5.10
	417511	AL049176	Hs.82223	chordin-like	5.10
80	422336	AI761322	Hs.115285	dihydropyrimidine S-acetyltransferase (E2	5.10
	437682	AA765387	Hs.145095	ESTs	5.10
	429526	AA454182	Hs.99360	ESTs	5.10
	447332	AW445012	Hs.160918	ESTs	5.10
	436207	AA334774	Hs.12845	hypothetical protein MGC13159	5.10
	428155	H17012	Hs.14633	ESTs	5.10

	420185	AL044056	Hs.158047	ESTs	5.10
	445657	AW612141	Hs.279575	Homo sapiens G-protein coupled receptor	5.10
	440913	AI267491	Hs.160593	ESTs	5.10
	452943	BE247449	Hs.31082	hypothetical protein FLJ10525	5.10
5	428603	BE241619	Hs.24541	cytoskeleton associated protein 2	5.10
	435577	WB4774	Hs.17643	ESTs	5.10
	400241	NA	NA	NA	5.10
	437205	AL110232	Hs.279243	Homo sapiens mRNA; cDNA DKFZp564D2071 f	5.10
10	423654	AI674253	Hs.35828	ESTs	5.10
	417637	AA204969	Hs.234863	Homo sapiens cDNA FLJ12082 fs, clone HE	5.10
	430849	AI940727	Hs.270556	ESTs, Highly similar to AF156779 1 ASB-4	5.10
	452605	AW968557	Hs.90012	hypothetical protein FLJ23441	5.10
	440381	AA917808	Hs.190495	ESTs	5.10
15	441033	BE562555		gb:601325867F1 NIH_MGC_44 Homo sapiens c	5.10
	450229	R18717	Hs.8929	hypothetical protein FLJ11362	5.10
	447197	R36075		gb:gh88b01.s1 Soares placenta NbZHP Homo	5.10
	442150	AI368158	Hs.70983	PTPL1-associated RhoGAP 1	5.10
	415651	AI207162	Hs.3815	stathmin-like-protein RB3	5.10
	453655	AW960427	Hs.79059	transforming growth factor, beta recepto	5.09
20	434442	AA737415	Hs.152826	ESTs	5.09
	429389	AA454779	Hs.201441	Homo sapiens cDNA FLJ11079 fs, clone PL	5.09
	435419	AI281068	Hs.152835	ESTs	5.09
	427620	NM_003705	Hs.179866	solute carrier family 25 (mitochondrial	5.09
25	445706	AA305520	Hs.108812	hypothetical protein FLJ22004	5.08
	424071	R71340	Hs.12876	ESTs	5.08
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	5.08
	426400	M78361	Hs.169743	Homo sapiens clone Z5121 neuronal octact	5.08
	429026	AA443385	Hs.221993	ESTs	5.08
30	455847	BE146775		gb:OV4-HT0222-181099-013-e04 HT0222 Homo	5.08
	416110	Z42262	Hs.322644	hypothetical protein DKFZp564A176	5.08
	436854	AA749167	Hs.173911	ESTs	5.08
	421799	AW972292	Hs.292988	ESTs	5.08
	452154	AW953265	Hs.302746	MSTP028 protein	5.06
35	444946	AW139205	Hs.156457	hypothetical protein FLJ22408	5.06
	445950	AI267957	Hs.145706	ESTs	5.06
	443124	AI033500	Hs.132895	ESTs	5.06
	440698	AI348455	Hs.147492	Homo sapiens cDNA FLJ11777 fs, clone HE	5.06
	444713	AW812074	Hs.28631	Homo sapiens cDNA: FLJ22141 fs, clone H	5.06
40	447970	AW086109	Hs.20136	chromosome X open reading frame 6	5.06
	419307	AW953190	Hs.23180	ESTs	5.06
	421954	AA410245	Hs.40323	BUB3 (budding uninhibited by benzimidazo	5.06
	451807	WS2854	Hs.27099	hypothetical protein FLJ23293 similar to	5.05
	421782	AB029290	Hs.108258	actin binding protein; macrophilin (microf	5.05
45	407976	AI633875	Hs.77823	hypothetical protein FLJ21343	5.05
	400869			NA	5.04
	416153	R13894		gb:yf62a06.r1 Soares infant brain 1N1B H	5.04
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	5.04
	405038	Y14443	Hs.88219	zinc finger protein 200	5.03
50	440659	AF134160	Hs.7327	claudin 1	5.03
	425188	AK002052	Hs.155071	hypothetical protein FLJ11190	5.02
	446051	BE048061	Hs.37054	ephrin-A3	5.02
	443387	BE139135	Hs.254629	ESTs	5.02
	414407	AA147026	Hs.76704	ESTs	5.02
55	408349	BE546947	Hs.44276	homeo box C10	5.01
	452510	Z33566	Hs.301491	ESTs	5.01
	447245	AK001713	Hs.17860	hypothetical protein FLJ10851	5.00
	413472	BE242870	Hs.75379	solute carrier family 1 (glial high affi	5.00
	447857	AA081218	Hs.58608	Homo sapiens cDNA FLJ14206 fs, clone NT	5.00
60	423648	AK000456	Hs.130546	hypothetical protein FLJ20449	5.00
	412997	BE046600		gb:hn41d08.x1 NCI_CGAP_RDF2 Homo sapiens	5.00
	408964	AF201468	Hs.49349	beta-site APP-cleaving enzyme	5.00
	411636	AW855001		gb:PM3-CT0263-091299-007-R05 CT0263 Homo	5.00
	418111	R42003	Hs.106513	ESTs	5.00
65	402709	NA		NA	5.00
	408677	AI279892	Hs.45801	sorting nexin 14	5.00
	411350	AW877011		gb:QV2-PT0010-250300-095-b05 PT0010 Homo	5.00
	453382	AA709285	Hs.5997	hypothetical protein FLJ13078	5.00
	458090	AI282149	Hs.56213	ESTs, Highly similar to FXD3_HUMAN FORKH	5.00
70	408512	AW902013	Hs.255937	ESTs	5.00
	453240	AI969564	Hs.166254	hypothetical protein DKFZp5661133	5.00
	440491	R35252	Hs.24944	ESTs, Weakly similar to 2109260A B cell	5.00
	423896	AA332216	Hs.130584	ESTs	5.00
	429091	AA935658	Hs.187839	ESTs	5.00
75	410968	AA199907	Hs.67397	homeo box A1	5.00
	436859	AA732681	Hs.270053	ESTs	5.00
	425198	AI097560	Hs.61210	ESTs, Weakly similar to I38022 hypothe	5.00
	424511	BE300512	Hs.193557	ESTs, Moderately similar to ALU7_HUMAN A	5.00
	414631	AW970130	Hs.65406	ESTs	5.00
80	405481			NA	5.00
	431118	BE264901	Hs.250502	carbonic anhydrase VIII	5.00
	421373	AA808229	Hs.167771	ESTs	5.00
	424916	AW867440	Hs.23096	ESTs	5.00
	433106	AB002443	Hs.184418	ESTs	5.00



5	427386	AW836261	Hs.337717	ESTs	5.00
	441998	AF733236	Hs.128312	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.00
	420161	AI683069	Hs.175319	ESTs	5.00
	430899	BE018217	Hs.183528	hypothetical protein FLJ14906	5.00
	415188	BE007531	Hs.258791	ESTs	5.00
	420429	AW293291	Hs.255180	ESTs	5.00
	439038	AV655045	Hs.8366	ESTs	5.00
	457031	AI497955	Hs.304802	ESTs, Weakly similar to KIAA0944 protein	5.00
10	430865	AI073424	Hs.5232	HSPC125 protein	5.00
	420583	H77859	Hs.65450	reticulon 4	5.00
	432229	AW290976	Hs.143587	ESTs	5.00
	455208	BE180275		gb:RC3-HT0622-130400-022-a02 HT0622 Homo	5.00
	419263	AW583874	Hs.89832	insulin	5.00
	452279	AA286844	Hs.61260	hypothetical protein FLJ13164	5.00
15	419100	AA464362	Hs.6748	hypothetical protein PP1665	5.00
	438585	AA811371	Hs.123362	ESTs	5.00
	436953	AW959074	Hs.23648	Homo sapiens cDNA FLJ13097 fs, clone NT	5.00
	428775	AA434579	Hs.143691	ESTs	5.00
20	422471	AA311027	Hs.271894	ESTs, Weakly similar to I38022 hypotheti	5.00
	402524			NA	5.00

TABLE 468:

25	Phy:	Unique Eos probeset identifier number
	CAT number:	Gene cluster number
	Accession:	Genbank accession numbers

30	Phy	CAT number	Accessions
	408248	1049240_1	AW854832 AW854798 AW854857 AW854816 AW854834 AW854817
	408432	1058667_1	AW195262 R27868 AW811262
	408744	1078309_1	AW806177 AW806178 AW265775
	409948	116139_1	AA078643 BE535933 AA132607
	410424	120166_1	AA084984 Z18302 AW502279 AW499519
	410444	1203699_1	W73484 AW748569 AW748532 AW748585
	410498	120611_1	AA355749 AA085520 AW966333 AA340319 BE170936
35	410784	1221005_1	AW803201 BE079700 BE062940
	410979	1228509_1	BE151480 D63282 AW812615
	411253	1236671_1	AW833897 AW833907 AW833908 AW833920 AW833953 AW833881 AW833878 AW833879 AW833952 AW833919 AW833921 AW833915
	411350	1239976_1	AW877011 AW877066 AW877136 AW876980 AW991827 AW877073 AW877070 AW882665 AW876972 AW877068 AW877064 AW838297 AW877065
			AW876974 AW877101 AW877067 AW877127 AW876975 AW876979 AW876983 AW877131 AW877104
40	411636	1252525_1	AW855001 AW855031 BE062221
	411861	1261785_1	AW867875 BE067343 BE067301 BE067350 BE067305 BE067347 BE067306 BE067304 BE067303 BE067302 AW938147
	412227	1284297_1	AW902282 AW902508 AW902509 AW902605 AW902606 AW902643 AW902490
	412345	1289783_1	AW938386 AW938411 AW938426 AW938397
45	412396	1292796_1	AW947895 AW947891 AW947933 AW947892 AW947930 AW947889 AW947894 AW947931 AW947893 AW947932 AW947929
	412997	1343205_1	BE046600 BE046677 BE046236
	413604	1379715_1	R51767 BE152515 Z44834 H23397
	413894	1397740_1	BE177983 BE178322
	414727	1481204_1	BE466904 W28721
50	415308	1533673_1	F05251 R13748 Z44028 H14747
	415371	1535066_1	R15239 Z45189 F06836
	415397	1535937_1	H10818 F07831 Z43072
	415637	1540904_1	R25517 F13222 T75465
	416153	1573947_1	R13894 H23037 R56371
	416190	1576789_1	N54000 H26494 T83818
55	416845	1624038_1	H95279 H95331 H95933
	416913	163001_1	AW934714 BE161007 BE162500 AW749902 AW749864 BE162498 BE161005 AA190449 AW513465 BE161006 BE162499
	417352	166908_1	AA195919 D79180 BE543135 BE008355 BE008353 BE008315 BE008317
	417588	1688092_1	Z44510 R24958 R00714 T82024
60	418247	1733290_1	R55174 Z18829 X97508
	418553	1767393_1	T88964 R99447 T84773
	418647	177521_1	AA226198 AA226513 AA383773
	418866	179788_1	T65754 AA229857 AA229658
	423172	225618_1	R15652 AA322742 AW961639 AW961637
65	423289	226804_1	N77774 AA324125 AW955199 AA452230
	423395	227885_1	AA326613 AA325417 AW962164
	423928	233416_1	AA332680 AA332831 AW962684
	424205	236651_1	AA336825 AA337256 AA337682 AA337525
	425757	255956_1	AA363171 AW963347 AA371863
70	428679	294049_1	AA431765 AA432015
	430264	315008_1	AA470519 BE303010 BE302954 BE384120
	430818	324239_1	AI311928 AA936030 T51931 AA609816 AA487195 AA664207
	432494	348522_1	AA551060 AW979274 AA847429 AA878487
	432639	351744_1	AW973785 H60163 AA557608
	433009	357371_1	AA761668 AA573621 R92814 R09670
75	434006	37855_1	AF113688 AI114617
	434603	38944_1	AF147384 T60126 T60244
	435411	419334_1	AW674352 AA715374 Z25205
	437092	432938_1	AA744292 AA745577 AW748517 AW748564 AW748511 AW748513 AW748530 AW748574 BE062923
	437237	43506_2	BE513073
80	441033	50807_1	BE562555
	441761	525307_1	AI222880 AI242392 AA961560 AI242524 AI719648 AI718138 AW275807
	442075	532052_1	AW136928 AI685655 BE218584 BE465078 N68963 AA975338 BE147199 N76377

445165	63181_1	AV652831 AA191140 AA329706 A1267893 A1796986 AW675672 AW195369 BE002835 BE003284 AA190592 AA769594 AW275548 R56781 AA807313
447197	711623_1	AW169695 N31806
453685	977734_1	R36075 AJ365546 R36167
454511	1220533_1	AL110309 AW088119 H22881
454758	1233743_1	AW948146 AW948135 AW802578
454835	1236507_1	AW845266 AW845254 AW819440 AW819430 AW819425 AW819423
455082	1252687_1	AW833763 AW833704 AW833618
455208	1260551_1	BE148180 AW855210 AW855243
455212	1260678_1	BE180276 AW866156 BE180165
455217	1261522_1	AW866330 AW866332 AW866411 AW866327 AW866326 AW866335 AW866334 AW866331 AW866333 AW866328 AW866329
455608	1337389_1	AW867534 AW867539
455847	1375358_1	BE011437 BE011402 BE011395 BE011428 BE011407 BE011421 BE011406
455944	1385569_1	BE146775 BE146789 BE146792 BE147010 BE146941 BE146801 BE146998 BE147011 BE146903 BE146901
457892	432926_1	BE160643 BE160585
457893	432938_1	AA744389 AA744270 AA744284 AA744299 AA745380 AA744337 AA846905 AA847698
459279	975649_1	AA744292 AA745577 AW748517 AW748564 AW748511 AW748513 AW748530 AW748574 BE062923
		AW814996 AL047199 AW850979

TABLE 46C:

Pkey:	Unique number corresponding to an Eos probeset
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NL_position:	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
400484	8569067	Minus	52725-52912
400570	9884797	Minus	156787-156862,178082-178208,186819-186957
400639	9887597	Plus	23150-23580
400845	9188605	Plus	34428-34612
408860	9757499	Minus	151830-152104,152649-152744
400869	9838306	Plus	29152-30102
400950	7658481	Minus	157920-158564
400977	8072510	Plus	73950-74364
401004	7229582	Plus	62580-62772
401093	8516137	Minus	22335-23166
401183	7670214	Minus	39921-40601
401205	9743388	Plus	167373-167433,167936-168031
401208	7712287	Plus	163145-163281
401244	4827300	Minus	55359-56376
401348	9930791	Minus	9365-9490
401372	9944181	Plus	127056-127196
401424	8176894	Plus	24223-24428
401581	9502454	Plus	9440-10165
401629	8575965	Minus	169336-169788
401708	2951946	Plus	154511-155298
401736	3219338	Plus	1771-1894
401740	2982169	Plus	148357-148484,148591-148690
401747	9789672	Minus	118596-118816,119119-119244,119609-119761,120422-120950,130161-130381,130468-130593,131097-131258,131866-131932,132451-132575,133580-134011
401961	4581193	Minus	124054-124209
402343	8099256	Plus	4677-6084
402363	9454515	Plus	25693-25991
402408	9796239	Minus	110326-110491
402524	9798518	Minus	20529-21096
402709	8901246	Minus	56847-57055
402732	9211639	Minus	147904-148107
403040	3133144	Minus	91632-91788,97918-98115
403137	9211494	Minus	92349-92572,92958-93084,93579-93712,93949-94072,94591-94748,95214-95337
403199	9958183	Minus	58895-59036,66618-66789
403278	8072597	Plus	146823-146986
403546	8078400	Plus	94703-94849
403764	7717105	Minus	118692-118853
403776	7770611	Minus	1414-1513,1624-1756
403859	7708954	Plus	113738-113858
403973	8575876	Plus	93873-94384
404012	8655948	Plus	551356-552233
404029	7671252	Plus	108716-111112
404072	9931705	Plus	49546-50498
404117	9796029	Plus	149723-149920
404170	9930793	Plus	168836-169248
404335	9838027	Minus	21030-21145,26504-26692
404440	7528051	Plus	80430-81581
404832	9796668	Plus	45096-45229
404702	7630798	Plus	78043-78890
404913	7341740	Plus	97717-97976
404996	6007890	Plus	37999-38145,38652-38998,39727-39872,40557-40674,42351-42450
405033	7107731	Minus	142358-142546
405065	7684500	Minus	13855-14027
405114	8096938	Minus	97013-97560
405287	3928029	Plus	89802-89999
405352	2822162	Minus	97253-97742
405362	2337862	Minus	105008-105142,105980-106091,140445-140556,142519-142641

	405481	3688109	Plus	5718-5837,8719-8818
	405511	9454623	Plus	57731-57852
	405523	9454643	Plus	114550-114688,117265-117407,119490-119599,123237-123395,131140-131217
5	405543	9857582	Minus	104338-104449
	405545	1054740	Plus	118677-118807,119091-119296,121626-121823
	405637	6289229	Plus	189852-189978
	405696	4309923	Minus	1865-2013,2124-2231
	405770	2735037	Plus	61057-62075
10	406465	9795550	Plus	94502-94706,96776-96914,98795-98928,102423-102576,105087-105191,107023-107127,108852-108992

TABLE 47A: ABOUT 370 GENES SIGNIFICANTLY DOWN-REGULATED IN STOMACH CANCER COMPARED TO NORMAL STOMACH

Table 47A lists about 370 genes significantly down-regulated in stomach cancer compared to normal stomach. These were selected as for Table 46A, except that the numerator and denominator were switched and the ratio was equal to or less than 0.33.

15	denominator were switched and the ratio was equal to or less than 0.5.				
	Key:	Unique Eos probeset identifier number			
	ExAccn:	Exemplar Accession number, Genbank accession number			
	UnigeneID:	Unigene number			
	Unigene Title:	Unigene gene title			
	R1:	Ratio of tumor to normal body tissue			
20					
	Key	ExAccn	UnigeneID	Unigene Title	R1
	412859	NM_000705	Hs.813	ATPase, H <sup>+</sup> /K <sup>+</sup> exchanging, beta polypept	0.02
	423371	AU076819	Hs.1650	solute carrier family 26, member 3	0.02
25	425607	U09860	Hs.158333	protease, serine, 7 (enterokinase)	0.04
	429050	X81333	Hs.194777	meprin A, beta	0.04
	421996	AW583807	Hs.1460	glucagon	0.05
	441212	AW242447	Hs.146182	cytosolic beta-glucosidase	0.05
	429093	NM_000253	Hs.195799	microsomal triglyceride transfer protein	0.06
	403697	NA		NA	0.07
30	402760	NA		NA	0.08
	428285	AW340797	Hs.98434	ESTs	0.08
	419279	AA235900	Hs.87500	ESTs	0.08
	422459	K02100	Hs.117050	ornithine carbamoyltransferase	0.09
	422992	AF016833	Hs.122785	maltase-glucosylase (alpha-glucosidase)	0.09
35	430867	M16404	Hs.248099	cholinergic receptor, muscarinic 2	0.09
	453989	M63962	Hs.36992	ATPase, H <sup>+</sup> /K <sup>+</sup> exchanging, alpha polypept	0.10
	443022	AL046485	Hs.207604	ESTs	0.10
	413382	BE090689		gb:RC1-BT0720-280300-011-R08 BT0720 Homo	0.10
	450769	AA057418	Hs.33654	ESTs	0.10
40	428070	T63918	Hs.182313	retinol-binding protein 2, cellular	0.10
	415447	Z97171	Hs.78454	myocilin, trabecular meshwork inducible	0.11
	430073	U86136	Hs.232070	telomerase-associated protein 1	0.11
	431716	D89053	Hs.268012	fatty-acid-Coenzyme A ligase, long-chain	0.12
45	416889	AW250318	Hs.80395	mal, T-cell differentiation protein	0.12
	405650	NA		NA	0.12
	419219	AW583139	Hs.89717	carboxypeptidase A2 (pancreatic)	0.12
	401623	NA		NA	0.12
	400811	AF219139	Hs.87726	KIAA0154 protein; ADP-ribosylation facto	0.13
50	455826	BE144228		gb:MR0-HT0165-140200-009-d04 HT0165 Homo	0.13
	414949	C15314	Hs.323349	ESTs	0.13
	407486	S69741		gb:hSCG-3=stomach cancer gene-3 (oncogen	0.13
	407494	U10072		gb:Human forkhead family (AFX1) mRNA, pa	0.13
	401015	NA		NA	0.13
55	426651	AU076646	Hs.171683	nuclear receptor subfamily 1, group H, m	0.14
	450926	A1744361	Hs.205591	ESTs, Weakly similar to T46608 zinc fing	0.14
	443564	A1921685	Hs.199713	ESTs	0.14
	457955	A1208986	Hs.143945	ESTs	0.14
	457345	A1699933	Hs.192175	ESTs	0.14
	417118	U38654	Hs.50477	RAB27A, member RAS oncogene family	0.14
60	408518	BE162203	Hs.314758	ESTs	0.14
	444938	AW470690	Hs.148814	ESTs	0.15
	403670	NA		NA	0.15
	432440	X63597	Hs.2996	sucrase-isomaltase	0.15
	428492	AW662740	Hs.259391	ESTs	0.15
65	443607	A452512	Hs.134069	ESTs	0.15
	446914	BE044496	Hs.166994	FAT tumor suppressor (Drosophila) homolo	0.15
	424596	AB020639	Hs.151017	estrogen-related receptor gamma	0.15
	430350	BE169639		gb:PM1-HT0527-280200-005-a05 HT0527 Homo	0.16
	431094	AW972276	Hs.116195	ESTs	0.16
70	401683	NA		NA	0.16
	419278	AU076799	Hs.1247	apolipoprotein A-IV	0.16
	455071	BE145826		gb:MR0-HT0208-101299-202-e12 HT0208 Homo	0.16
	454282	AW296422		gb:U1-H-BW0-aio-h-05-0-UI.s1 NCL_CGAP_Su	0.16
	428848	NM_000230	Hs.194236	leptin (murine obesity homolog)	0.16
75	451729	AW160725	Hs.312469	ESTs	0.16
	451103	RS2804	Hs.25956	DKFZP564D206 protein	0.16
	428602	AL137479	Hs.186655	Homo sapiens mRNA; cDNA DKFZp434M0223 (I	0.16
	437157	BE048860	Hs.120655	ESTs	0.17
	422731	AL138411		gb:DKFZp434A1229_r1 434 (synonym: htes3)	0.17
80	402015	NA		NA	0.17
	414758	H82022	Hs.282847	pregnancy specific beta-1-glycoprotein 3	0.17
	412793	AW997986		gb:RC1-BN0056-230200-021-e11 BN0056 Homo	0.17
	438152	AW292520	Hs.122082	ESTs	0.17

	401685	NA		NA	0.17
	441519	AA972740	Hs.127092	ESTs	0.17
	438327	H87407	Hs.172944	chorionic gonadotropin, beta polypeptide	0.17
	402761	BE387621	Hs.108809	chaperonin containing TCP1, subunit 7 (e	0.17
5	424268	AA397653	Hs.307438	Human DNA sequence from clone 495010 on	0.18
	414507	AW102637	Hs.13349	Homo sapiens cDNA FLJ14647 fs. clone NT	0.18
	413808	J00287	Hs.182183	Homo sapiens mRNA for cadexmon, 3' UTR	0.18
	401132	NA		NA	0.18
10	412374	X01388	Hs.73849	apolipoprotein C-III	0.18
	423417	AP000365	Hs.128342	potassium large conductance calcium-acti	0.18
	447677	A1419235		gb:tf21d02.x1 NCI_CGAP_Bm23 Homo sapien	0.18
	448828	AJ580296	Hs.174782	ESTs, Weakly similar to KIAA1437 protein	0.18
	424122	AA335593	Hs.116147	ESTs	0.18
	417332	AW972717	Hs.268462	hypothetical protein FLJ21511	0.18
15	434597	AW974668		gb:EST386757 MAGE resequences, MAGM Homo	0.19
	428804	AK000713	Hs.193736	hypothetical protein FLJ20706	0.19
	410280	AA083558	Hs.261286	ESTs	0.19
	409382	AA071244		gb:zm73g03.r1 Stratagene neuroepithelium	0.19
20	428062	AA420683	Hs.98321	hypothetical protein FLJ14103	0.19
	426069	H10807	Hs.281434	Homo sapiens cDNA FLJ14028 fs. clone HE	0.19
	430135	NM_000035	Hs.234234	aldolase B, fructose-bisphosphate	0.19
	414802	AJ793107	Hs.27018	Ris	0.19
	457432	NM_005136	Hs.268538	potassium voltage-gated channel, Isk-rel	0.19
	446909	AA004895	Hs.30082	ESTs	0.19
25	435447	AJ872932		gb:wm72e03.x1 NCI_CGAP_U12 Homo sapiens	0.20
	408611	NM_004367	Hs.46468	chemokine (C-C motif) receptor 6	0.20
	423577	AW810107	Hs.58633	Homo sapiens cDNA: FLJ22145 fs. clone H	0.20
	439328	W07411	Hs.118212	ESTs, Moderately similar to ALU3_HUMAN A	0.20
30	436741	AA860163	Hs.291319	ESTs	0.20
	426635	BE395109	Hs.129327	hypothetical protein MGC13057	0.20
	418277	AW135221	Hs.130812	ESTs	0.20
	448871	BE616709	Hs.159265	kruppel-related zinc finger protein hckr	0.20
	459370	AA889982	Hs.271826	ESTs, Weakly similar to I38022 hypotheti	0.21
	427469	AA403084	Hs.269347	ESTs, Weakly similar to 2109260A B cell	0.21
35	432887	AJ926047	Hs.162859	ESTs	0.21
	421296	NM_002666	Hs.103253	perilipin	0.21
	449216	AW295417	Hs.224616	ESTs	0.21
	414835	AA156720	Hs.185342	ESTs	0.21
40	459233	AJ939966		gb:MR0-CT0015-160799-002-b06 CT0015 Homo	0.21
	439756	AL359651	Hs.283852	Homo sapiens mRNA full length insert cDN	0.21
	427167	AJ239507	Hs.99196	hypothetical protein MGC11324	0.21
	400410	AF154915	Hs.283958	homeo box D12	0.21
	409828	AW501137		gb:U1-HF-BP0p-ait-e-12-0-U1.r1 NIH_MGC_5	0.22
45	428470	AC002301	Hs.184507	Homo sapiens Chromosome 16 BAC clone CIT	0.22
	455968	BE168828		gb:QV1-HT0517-020400-145-R04 HT0517 Homo	0.22
	404145	NA		NA	0.22
	454011	M31008	Hs.37009	alkaline phosphatase, intestinal	0.22
	430588	AJ741461	Hs.161904	ESTs	0.22
50	403652	NA		NA	0.22
	404010	AW204436	Hs.128715	ESTs	0.22
	453871	BE300380	Hs.69476	Homo sapiens cDNA FLJ12758 fs. clone NT	0.22
	458567	AJ222075	Hs.147831	ESTs	0.22
	436004	AA703332	Hs.196270	folate transporter/carrier	0.22
55	417408	F17211	Hs.85092	Homo sapiens skeletal myosin light chain	0.22
	448643	AJ557531		gb:pt2.1-06.D06.r tumor2 Homo sapiens cD	0.22
	404401	NA		NA	0.22
	428088	AA421130	Hs.112640	EST	0.22
	427074	AA527435	Hs.178589	hepatocellular carcinoma antigen gene 52	0.22
60	421972	M18185	Hs.1454	gastric inhibitory polypeptide	0.22
	429001	AF098951	Hs.194720	ATP-binding cassette, sub-family G (WHIT	0.22
	441155	AW161008	Hs.7719	GABA(A) receptor-associated protein	0.22
	402750	NA		NA	0.22
	438587	AA811450	Hs.136984	ESTs	0.22
65	404848	NA		NA	0.22
	427833	AA416615	Hs.98242	ESTs	0.23
	439907	AA853978	Hs.124577	ESTs	0.23
	414373	AW162907	Hs.75969	proline-rich protein with nuclear target	0.23
	446817	AJ700684	Hs.134166	ESTs	0.23
70	437333	AA748898		gb:my76h10.s1 NCI_CGAP_GCB1 Homo sapiens	0.23
	404097	NA		NA	0.23
	445393	AW014174	Hs.301956	zinc finger protein	0.23
	456328	T41368		gb:ph1d1_19/1TV Outward Alu-primed hncDN	0.23
	401042	NA		NA	0.23
75	458441	AW842283	Hs.79933	cyclin I	0.23
	435547	AW117431	Hs.191906	ESTs	0.23
	429060	AW139155	Hs.194995	hypothetical protein DKFZp43400320	0.23
	425158	AW954631	Hs.266940	I-complex-associated-testis-expressed 1-	0.23
	448758	AB018311	Hs.21917	KIAA0768 protein	0.23
80	441240	AA923749	Hs.132442	ESTs	0.23
	436562	H71937	Hs.322904	ESTs, Weakly similar to I38022 hypotheti	0.23
	424104	AA669515	Hs.144950	ESTs	0.23
	447452	BE618258	Hs.102480	Homo sapiens, clone IMAGE:3869590, mRNA,	0.23
	444515	AW204908	Hs.169979	ESTs	0.24

	433084	M18079	Hs.282265	fatty acid binding protein 2, intestinal	0.24
	406560	NA		NA	0.24
	432408	N39127	Hs.332557	ESTs, Weakly similar to A46010 X-linked	0.24
	455699	BE068121		gb:CM1-BT0368-061299-060-a02 BT0368 Homo	0.24
5	453979	M68895	Hs.76800	alcohol dehydrogenase 6 (class V)	0.24
	439657	W93589		gb:zd95g05.s1 Soares fetal heart_NbHH19W	0.24
	407512	X15674		gb:Human pTFR mRNA for repetitive sequen	0.24
	440875	AW138036	Hs.201788	ESTs	0.24
	404753	NA		NA	0.24
10	411119	M60627	Hs.753	formyl peptide receptor 1	0.24
	418692	AK000268	Hs.87383	hypothetical protein	0.24
	415327	H22769		gb:ym54c02.r1 Soares infant brain 1N8 H	0.24
	429446	A1547111		gb:PN2.1_A01_G12.r1 mynorm Homo sapiens c	0.24
	455391	BE156230		gb:QV0-HT0367-310100-102-c11 HT0367 Homo	0.25
15	422818	AA404290	Hs.97848	ESTs	0.25
	435338	AA678071	Hs.194300	ESTs, Weakly similar to I38022 hypothe	0.25
	414203	BE262170	Hs.78629	ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, beta 1 poly	0.25
	403941	NA		NA	0.25
20	414383	BE279406		gb:601157981F1 NIH_MGC_21 Homo sapiens c	0.25
	412008	NM_001841	Hs.73037	cannabinoid receptor 2 (macrophage)	0.25
	424985	AJ907236	Hs.279935	Homo sapiens cDNA FLJ11780 fis, clone HE	0.25
	450736	AW970060		gb:EST382140 MAGE resequences, MAGK Homo	0.25
	431185	H02767	Hs.28944	ESTs	0.25
	455308	AW893949		gb:RC4-NN0027-060400-011-a09 NN0027 Homo	0.25
25	435464	BE548300	Hs.192999	ESTs, Moderately similar to KIAA0961 pro	0.25
	418525	AW450369	Hs.86937	ESTs	0.25
	402790			NA	0.25
	411869	W20027	Hs.23439	ESTs	0.25
30	400332	S68407	Hs.248032	FLT4	0.25
	424884	AW299437	Hs.225717	ESTs	0.25
	414376	BE393856	Hs.66915	ESTs, Weakly similar to 16.7Kd protein [	0.25
	439780	AL109588		gb:Homo sapiens mRNA full length insert	0.25
	408947	AL080093	Hs.49117	Homo sapiens mRNA; cDNA DKF Zp564N1662 (I	0.25
	404900	NA		NA	0.25
35	441918	AJ733373	Hs.128119	ESTs	0.25
	441639	AJ133287	Hs.303953	ESTs	0.25
	459396	AJ907536	Hs.103869	ESTs	0.25
	452755	AW138937	Hs.213436	ESTs, Weakly similar to A34087 hypothe	0.25
40	422183	AA431698	Hs.112794	Human DNA sequence from clone 1068E13 on	0.25
	415186	AA160945	Hs.14479	Homo sapiens cDNA FLJ14199 fis, clone NT	0.26
	429450	AA824451	Hs.94292	hypothetical protein FLJ23311	0.26
	455615	BE045344	Hs.274923	ESTs, Moderately similar to unnamed prot	0.26
	454633	AW811380		gb:IL3-ST0143-290999-019-D05 ST0143 Homo	0.26
45	424853	BE549737	Hs.132967	Human EST clone 122887 mariner transpos	0.26
	455802	BE141491		gb:MR0-HT0080-011099-002-h06 HT0080 Homo	0.26
	414003	AA134472		gb:zo13c01.s1 Stratagene colon (937204)	0.26
	436363	AA843926	Hs.124434	ESTs	0.26
	456074	BE409525	Hs.902	neurofibromin 2 (bilateral acoustic neur	0.26
	430569	AF241254	Hs.178098	angiotensin I converting enzyme (peptidy	0.26
50	445635	AJ769774	Hs.205831	ESTs, Weakly similar to ALU1_HUMAN ALU S	0.26
	405953	NA		NA	0.26
	411021	F00055	Hs.172004	itin	0.26
	428443	BE618106	Hs.184326	CDC10 (cell division cycle 10, S. cerevi	0.26
55	434345	AF127772		gb:Homo sapiens cell-line E8CASS clone E	0.26
	455743	BE073754		gb:RC0-BT0561-210100-032-007 BT0561 Homo	0.26
	451138	W92287	Hs.40268	ESTs	0.26
	449528	H63337	Hs.38178	hypothetical protein FLJ23468	0.26
	441040	AW449782	Hs.178803	ESTs	0.26
60	458830	AW501248	Hs.250824	Homo sapiens cDNA: FLJ23435 fis, clone H	0.26
	428861	AW352234	Hs.268365	ESTs, Weakly similar to ALU8_HUMAN ALU S	0.26
	435469	AW388237	Hs.191204	ESTs	0.27
	427582	R56424	Hs.26534	ESTs	0.27
	434779	AF153815	Hs.50151	potassium inwardly-rectifying channel, s	0.27
65	423528	AB011137	Hs.300938	KIAA0565 gene product	0.27
	406589			NA	0.27
	450059	BE220223	Hs.279626	ESTs	0.27
	417296	L36196	Hs.81884	sulfotransferase family, cytosolic, 2A,	0.27
	454007	AW015870	Hs.232081	ESTs	0.27
70	426062	N57014	Hs.75874	pregnancy-associated plasma protein A	0.27
	441665	AJ301355	Hs.151285	ESTs	0.27
	405037	NA		NA	0.27
	446820	AW295037	Hs.254986	ESTs	0.27
	448487	AJ523720	Hs.172567	ESTs	0.27
	447567	AW474513	Hs.224397	ESTs, Weakly similar to I38931 Wiskott-A	0.27
75	408540	L13220	Hs.639	calbindin 3, (vitamin D-dependent calci	0.27
	407601	AC002300	Hs.37129	sodium channel, nonvoltage-gated 1, beta	0.27
	432501	BE546532	Hs.25682	Homo sapiens mRNA for KIAA1863 protein,	0.27
	401350	NA		NA	0.27
80	417569	R00271	Hs.144651	ESTs	0.27
	443542	AJ927065	Hs.146040	ESTs	0.27
	437105	AA744554	Hs.222127	ESTs	0.27
	432119	T80289	Hs.302041	Homo sapiens clone 24762 mRNA sequence	0.27
	419056	M89957	Hs.89575	CD79B antigen (immunoglobulin-associated	0.28

	427812	AA770424	Hs.98162	ESTs	0.28
	423557	AB011176	Hs.129801	KIAA0604 gene product	0.28
	445311	AW027556	Hs.156286	ESTs	0.28
	402758	NA		NA	0.28
5	448240	AI478345	Hs.191034	ESTs	0.28
	401333	NA		NA	0.28
	444107	T46839	Hs.10319	UDP glycosyltransferase 2 family, polype	0.28
	454738	BE072139		gb:PM1-BT0533-291299-002-b05 BT0533 Homo	0.28
10	442896	R37725	Hs.261108	ESTs	0.28
	447949	AI446820	Hs.165839	EST	0.28
	435625	H50654	Hs.113999	ESTs	0.28
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-1	0.28
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	0.28
	442967	AK025460	Hs.220977	ESTs	0.28
15	448062	AW295923	Hs.255472	KIAA1843 protein	0.28
	425860	L29339	Hs.1964	solute carrier family 5 (sodium/glucose	0.28
	451839	AI820516	Hs.16857	ESTs	0.28
	446000	AV656052	Hs.1504	hemopexin	0.28
	443506	H10661	Hs.192124	ESTs, Weakly similar to I38022 hypotheti	0.28
20	418345	AJ001696	Hs.241407	serine (or cysteine) proteinase inhibito	0.28
	445481	AW661846	Hs.148836	ESTs	0.28
	409337	H71289	Hs.220635	ESTs	0.28
	411414	AW897236		gb:CMO-NN0057-150400-335-c06 NN0057 Homo	0.28
	427642	R40761	Hs.9834	ESTs	0.28
25	456392	W28766		gb:51d3 Human retina cDNA randomly prime	0.28
	409920	BE169746	Hs.12504	likely ortholog of mouse Arkadia	0.28
	410285	AA083609		gb:zm63d05.r1 Stratagene fibroblast (937	0.28
	442496	R55073	Hs.124130	ESTs	0.28
30	423770	AW976766	Hs.132776	Homo sapiens cDNA FLJ10077 fis, clone HE	0.28
	423467	AK000214	Hs.129014	hypothetical protein FLJ20207	0.29
	458716	N99013	Hs.16762	Homo sapiens mRNA: cDNA DKFZp564B2062 (f	0.29
	423235	AW410698	Hs.169917	neurabin II	0.29
	431087	H12723	Hs.290791	ESTs	0.29
	459106	AW589793	Hs.224713	ESTs	0.29
35	414870	N72264	Hs.300670	KIAA1204 protein	0.29
	402243			NA	0.29
	432628	R02394	Hs.269436	ESTs, Moderately similar to PC4259 ferri	0.29
	404364	NA		NA	0.29
	400480			NA	0.29
40	456083	U46922	Hs.77252	fragile histidine triad gene	0.29
	446598	AW250546		gb:2821774.5prime NIH_MGC_7 Homo sapiens	0.29
	422201	NM_001505	Hs.113207	G protein-coupled receptor 30	0.29
	443919	AI091284	Hs.135224	ESTs, Weakly similar to A47582 B-cell gr	0.29
45	453948	AI970797	Hs.64859	ESTs	0.29
	403792	NA		NA	0.29
	418957	AI792615	Hs.188712	ESTs	0.29
	457960	AA771881	Hs.298149	ESTs	0.29
	404269			NA	0.29
50	439309	AF090097	Hs.6524	Homo sapiens clone IMAGE 25997	0.29
	458239	BE439877	Hs.283389	ESTs	0.30
	414941	C14865	Hs.332341	ESTs	0.30
	404954			NA	0.30
	441609	AA946764	Hs.133460	ESTs	0.30
55	426895	AA416880	Hs.225738	ESTs	0.30
	403182	NA		NA	0.30
	402319			NA	0.30
	429699	AI383469	Hs.159300	ESTs	0.30
	405669	NA		NA	0.30
60	459312	AF107457	Hs.37035	homeo box HB9	0.30
	431853	AA521034	Hs.70834	ESTs	0.30
	449768	AI972746	Hs.102945	ESTs, Weakly similar to I78885 serine/th	0.30
	443609	AV650231	Hs.282941	ESTs, Highly similar to A Chain A, Human	0.30
	454293	H49739	Hs.134013	ESTs, Moderately similar to HK61_HUMAN H	0.30
65	447569	AI393202	Hs.147554	hypothetical protein FLJ23392	0.30
	400128	NA		NA	0.30
	423208	AA323191	Hs.137064	cytoplasmic polyadenylation element bind	0.30
	434227	AF119893	Hs.63382	hypothetical protein PRO2714	0.30
	424208	AW583123	Hs.143113	pancreatic lipase-related protein 2	0.30
	401165	NA		NA	0.30
70	415394	R19249	Hs.22654	sodium channel, voltage-gated, type I, a	0.30
	443110	AW352243	Hs.132665	ESTs	0.30
	426724	AA383623	Hs.293616	ESTs	0.30
	416035	H42314		gb:yo09e02.s1 Soares adult brain N2b5HB5	0.30
75	409753	AA234847		gb:zs37b10.r1 Soares_NhHMPu_S1 Homo sapi	0.31
	459221	BE246522	Hs.306121	leukocyte receptor cluster (LRC) encoded	0.31
	408895	AA058730	Hs.191464	ESTs	0.31
	405110	NA		NA	0.31
	432430	AW079984	Hs.262480	ESTs, Weakly similar to PIHUB6 salivary	0.31
80	426442	AA378656	Hs.106510	ESTs, Moderately similar to ALU2_HUMAN A	0.31
	417165	H43346		gb:yp09a04.r1 Soares breast 3NbHBst Homo	0.31
	431854	AA383550	Hs.271699	polymerase (DNA directed) icla	0.31
	457553	AI861896	Hs.304505	ESTs	0.31
	412301	AW936328		gb:QV4-DT0021-281299-070-07 DT0021 Homo	0.31

	418626	AW299508	Hs.135230	ESTs	0.31
	416156	Z41922		gb:HSC038101 normalized infant brain cDN	0.31
	416275	H42823	Hs.155742	glyoxylate reductase/hydroxypyruvate red	0.31
	419091	T85332	Hs.178294	ESTs	0.31
5	420118	AW295297	Hs.182585	KIAA1276 protein	0.31
	451094	AJ949825	Hs.260395	ESTs	0.31
	403214	NA		NA	0.31
	412717	W00973	Hs.334728	ESTs	0.31
	428782	X12830	Hs.193400	interleukin 6 receptor	0.31
10	449202	AW295154	Hs.255396	ESTs	0.31
	433138	AB029496	Hs.59729	semaphorin sem2	0.31
	436602	AJ793222	Hs.166817	ESTs	0.31
	424844	D61524		gb:HUM413E07B Clontech human fetal brain	0.32
	435253	W91884		gb:zh47108.s1 Soares_fetal_liver_spleen_	0.32
15	455350	AW901809		gb:QV0-NN1020-170400-195-h02 NN1020 Homo	0.32
	416320	H47867	Hs.34024	ESTs	0.32
	406333			NA	0.32
	443652	AJ080692	Hs.134229	ESTs, Weakly similar to IS4401 hypertens	0.32
	457103	AJ421187	Hs.189192	ESTs, Weakly similar to T COMPLEX TESTIS	0.32
20	423593	AA328144		gb:EST31752 Embryo, 12 week I Homo sapie	0.32
	453242	T98327	Hs.18343	ESTs	0.32
	456281	AA284166	Hs.84113	cyclin-dependent kinase inhibitor 3 (CDK	0.32
	403847	NA		NA	0.32
	458711	AL036877	Hs.282878	ESTs	0.32
25	406242	NA		NA	0.32
	433493	AA594915	Hs.155087	ESTs	0.32
	458147	AW752597		gb:IL3-CT0214-161299-045-B06 CT0214 Homo	0.32
	437403	AJ208149	Hs.121196	ESTs	0.32
	407823	D44744	Hs.247447	ESTs	0.32
30	457300	AW297436	Hs.158849	Homo sapiens cDNA: FLJ21663 fls, clone C	0.32
	436089	AA804957	Hs.119840	ESTs	0.32
	457463	AW877031	Hs.272321	hypothetical protein FLJ12571	0.32
	433370	AJ084343	Hs.122310	ESTs	0.32
	436298	AW293496	Hs.180138	ESTs	0.32
35	419768	T72104	Hs.93194	apolipoprotein A-I	0.33
	449428	AJ651280	Hs.195685	ESTs	0.33
	406291	NA		NA	0.33
	409699	BE154650		gb:PM3-HT0344-071299-003-c08 HT0344 Homo	0.33
	418162	T11958		gb:A802R Heart Homo sapiens cDNA clone A	0.33
40	408316	AW807771		gb:MR4-ST0098-090300-003-c05 ST0098 Homo	0.33
	404187	NA		NA	0.33
	452992	AJ792376	Hs.31290	Homo sapiens clone 23832 mRNA sequence	0.33
	448355	AA93734	Hs.329374	ESTs	0.33
	442423	BE326264	Hs.246842	ESTs	0.33
45	439474	AJ824060	Hs.211501	ESTs	0.33
	457149	AA429575	Hs.297493	ESTs	0.33
	448623	BE613468	Hs.107515	ESTs, Weakly similar to T00329 hypotheti	0.33
	454790	AW820852		gb:RC2-ST0301-120200-011-112 ST0301 Homo	0.33
	419372	W28781		gb:5th3 Human retina cDNA randomly prime	0.33
50	406293	NA		NA	0.33
	422933	AF073931	Hs.122359	calcium channel, voltage-dependent, alph	0.33
	451818	AJ819018	Hs.339668	ESTs	0.33
	441912	AA971484	Hs.159338	ESTs	0.33
	429013	AJ012590	Hs.194728	hexose-6-phosphate dehydrogenase (glucos	0.33
55	422304	AK002016	Hs.114727	Homo sapiens, clone MGC:16327, mRNA, com	0.33
	457394	M86528	Hs.266902	neurotrophin 5 (neurotrophin 4/5)	0.33
	406597			NA	0.33
	451636	AW173270	Hs.140444	ESTs	0.33
60	424226	N94153	Hs.19155	ESTs	0.33

TABLE 47B:

Pkey: Unique Eas probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

65	Pkey	CAT Number	Accession
	408316	1051210_1	AW807771 AW179260 AW807851 AW179240 AW845961 AW807693 BE141176 AW807594 AW807772 AW845003 AW845963 AW179239
	409382	112508_1	AA071244 AA071477
	409699	1149033_1	BE154650 BE154785 AW468343 BE154816 BE154667
70	409753	115305_1	AA234847 AA077472
	409828	1155571_1	AW501137 AW501295 AW501212
	410285	119128_1	AA083609 AA083790 AA112048
	411414	1245024_1	AW897236 AW845406
	411765	125700_1	H43346 AA248302 AA095182
75	412301	1288123_1	AW936328 AW936539
	412793	1327636_1	AW997986
	413382	1365954_1	BE090689 BE090685 BE090697 BE090680 BE090691 BE090696 BE090698 BE090686
	414003	140888_1	AA134472 R76288 AW750262
	414383	1440279_1	BE279406 BE280100
80	415327	1534137_1	H22769 R35182 Z43545 F05783 N92089 H71928
	416035	1567254_1	H42314 H43080 H45217 H15384
	416156	1573980_1	Z41922 H23072 T77322
	418162	1725383_1	T11958 T11756 T11816 T20135 T19729 R45874

5	419372	1842942_1	W26781 W26588 W26377
	422731	220507_1	AL138411 AL138412 AA315860
	423593	229955_1	AA328144 AW962385 N30457
	424844	244291_1	D61524 AA347654 AW961758
	429446	304683_1	AJ547111 AW973749 AA558007
	430350	316401_1	BE169639 AA476976
	434345	38411_1	AF127772 AF062358 AF060217 AA652270 F23288
	434597	389383_1	AW974668 AA661959 AA649572 AA640401 AA640402
	435253	403478_1	W91884 W95119 AA676941
10	435447	406400_1	AJ872932 AA682306 BE220163 W68895 T81307 H91447
	437333	436167_1	AA748898 AW997701 AW997703
	439657	47499_1	W93589 W93487 AF086493
	439780	47673_1	AL109688 R23665 R26578
	446598	68463_1	AW250546 BE257108 BE251006 BE255957 BE250926 BE513012 AV659318
15	447677	732252_1	AA19235 AW055016 BE007490 BE550241
	448643	773566_-1	AJ557531
	450736	844652_1	AW970060 AJ732366 AJ792313 AW839644
	454282	1091035_1	AW296422 H72616 H63825
20	454633	1227504_1	AW811380 AW811385
	454738	1232449_1	BE072139 BE159797 BE159794 AW857974 AW817778
	454790	1234752_1	AW820852 AW820773 AW821088
	455071	1252281_1	BE145826 BE145815 BE145822 AW854707 BE145912
	455308	1278147_1	AW893949 AW893960 AW893966
	455350	1283853_1	AW901809 AW901787 AW901795 AW901792 AW901744 AW901753 AW901807 AW901798
25	455391	1288067_1	BE156230 BE156239 AW936260
	455699	1351258_1	BE068121 BE068090 BE068153 BE068128 BE068197 BE068136 BE068140 BE068185 BE068105
	455743	1354978_1	BE073754 BE073753 BE073755 BE073756 BE073752 BE073795 BE073796 BE073704 BE073791 BE073733 BE073695
	455802	1370828_1	BE141491 BE141016 BE141479
	455826	1373392_1	BE144228 BE144291
30	455968	1391117_1	BE168828 BE168830 BE168823 BE168928 BE168820 BE168826
	456328	1789791_1	T41368 T41369 T41294
	456392	1843059_1	W28766 W26500
	458147	488021_1	AW752597 AW848781 AW849062 AW848490 AW752699 AW752604 AW752700
35	459233	944881_1	AJ939966 AJ939988 AJ939951 AJ939981 AJ939976 AJ939959

TABLE 47C:

Pkey:	Unique number corresponding to an Eos probe set
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NL_position:	Indicates nucleotide positions of predicted exons.

	Pkey	Ref	Strand	NL_position
45	400480	8439796	Minus	110553-111119
	401015	8117441	Plus	72260-72369
	401042	8117611	Plus	151364-151606
	401132	8705350	Minus	85679-85795
	401165	9438376	Minus	168244-168423
50	401333	9884881	Plus	13852-14861
	401350	9931226	Plus	14471-14623
	401623	8575907	Plus	163249-163623
	401683	7689961	Plus	2934-3446
	401685	7689961	Minus	8038-8319
55	402015	7417802	Minus	48791-49043,50038-50205,51530-51672,54448-54565,55933-56073
	402243	7690137	Minus	196521-196721
	402319	7582559	Plus	116589-117549
	402750	7210067	Plus	69466-69678,71139-71284,71572-71865
	402758	9213869	Plus	87638-87924
60	402760	9213869	Plus	136829-136952,137336-137521
	402790	4835258	Minus	147744-147861
	403182	9838273	Plus	102163-102345,102545-102725
	403214	7630945	Minus	76723-77027,79317-79484
	403652	8705848	Minus	49991-50129
65	403670	7259739	Minus	88377-88537
	403697	3962501	Minus	102965-103174
	403792	7230192	Minus	149707-149873
	403847	7708844	Plus	317240-317391,317913-318032
	403941	7454203	Plus	114876-115342
70	404097	7770701	Plus	55512-55781
	404145	9863643	Plus	30607-31266
	404187	4481839	Plus	7644-7991
	404269	9711443	Plus	70261-70404,72944-73063
	404364	9954977	Minus	32586-33202
75	404401	7259738	Plus	71066-71326
	404753	7637341	Plus	14770-14931
	404848	8248647	Minus	23955-24034,25143-25264
	404900	7331453	Plus	22032-22219
	404954	7387327	Plus	131720-132042
80	405037	7543748	Minus	127374-127578
	405110	8096888	Minus	118940-119100
	405650	4926905	Minus	71743-72291
	405669	4508140	Plus	14130-14270
	405953	7960374	Minus	65101-65574



5	406242	7417725	Minus	36736-36951
	406291	5686274	Plus	9562-9867
	406293	5686274	Minus	17646-17953
	406333	9213235	Plus	64689-64798
	406560	7711569	Minus	35162-35292
	406589	8224211	Plus	38806-38989
	406597	8248613	Minus	132738-132985,134266-134425,135034-135192,135471-135608,137345-137478,138768-138912

# 10 TABLE 48A: ABOUT 426 GENES UPREGULATED IN MELANOMA RELATIVE TO NORMAL BODY TISSUES

Table 48A lists about 426 genes upregulated in melanoma relative to normal body tissues. These genes were selected from 59680 probesets on the Eos/Arraymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

15	Key:	Unique Eos probeset identifier number
	ExAccn:	Exemplar Accession number, Genbank accession number
	UnigeneID:	Unigene number
	Unigene Title:	Unigene gene title
	R1:	Mean of melanoma AIs divided by the mean of normal tissue AIs, where the minimum value for the numerator and denominator was set to 1.0

20	Key	ExAccn	UnigeneID	Unigene Title	R1
25	426555	NM 000372	Hs.2053	tyrosinase (oculocutaneous albinism IA)	376.61
	428555	H05769	Hs.188757	Homo sapiens, clone MGC-5564, mRNA, comp	324.36
30	430377	NM 001922	Hs.301865	dopachrome tautomerase (dopachrome delta	231.30
	453344	BE349075	Hs.44571	ESTs	180.67
35	425289	AW139342	Hs.155530	interferon, gamma-inducible protein 16	107.36
	417166	AA431323	Hs.42146	ESTs	97.76
40	425234	AW152225	Hs.165909	ESTs, Weakly similar to 138022 hypothet	96.76
	434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	94.52
45	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S.	90.88
	438209	AL120659	Hs.6111	aryl-hydrocarbon receptor nuclear transi	87.91
50	443983	H04482	Hs.163724	ESTs	85.55
	428513	BE220806	Hs.184697	Homo sapiens clone 23785 mRNA sequence	85.03
55	419956	AL137939	Hs.40096	cadherin 19, type 2	84.27
	423605	AF047826	Hs.129887	cadherin 19, type 2	80.88
60	430540	AW245422	Hs.1051	Homo sapiens cDNA: FLJ22105 fis, clone H	80.64
	418975	NM 004131	Hs.106260	granzyme B (granzyme 2, cytotoxic T-lymp	79.09
65	421633	AF121860	Hs.88594	sorting nexin 10	71.52
	442064	AI422867	Hs.86693	ESTs	69.88
70	418310	AA814100	Hs.132906	ESTs	67.94
	423799	AW026300	Hs.279704	19A24 protein	67.64
75	432886	BE159028	Hs.123469	chromatin accessibility complex 1	63.24
	456508	AA502764	Hs.279696	ESTs, Weakly similar to AF208855 1 BM-01	63.18
80	432882	NM 013257	Hs.169395	serum/glucocorticoid-induced kinase-II	62.33
	454088	AW062425	Hs.115474	pb:CM0-CT0042-090899-018-01 CT0042 Homo	61.62
85	430838	NA6664	Hs.38176	hypothetical protein FLJ12015	60.52
	422363	T55979	Hs.1390	replication factor C (activator 1) 3 (38	59.73
90	407748	AL079409	Hs.7753	KIAA0606 protein; SCN Circadian Oscillat	59.33
	450800	BE395161	Hs.44743	proteasome (prosome, macropain) subunit,	59.00
95	441224	AU076964	Hs.219907	calumenin	58.27
	408418	AW963897	Hs.89751	KIAA1435 protein	56.79
100	428001	H97428	Hs.1327	ESTs, Moderately similar to Transforming	56.45
	456373	BE247706	Hs.266175	membrane-spanning 4-domains, subfamily A	56.29
105	420674	NM 000055	Hs.98806	butyrylcholinesterase	56.15
	407856	AA045281	Hs.8262	phosphoprotein associated with GEMs	55.82
110	420552	AK000492	Hs.2490	hypothetical protein	55.39
	442355	AA456539	Hs.59461	lysosomal-associated membrane protein 2	54.97
115	429747	M87507	Hs.21621	caspase 1, apoptosis-related cysteine pr	52.85
	410174	AA306007	Hs.3686	DKFZP434C245 protein	52.00
120	437396	BE140396	Hs.22030	hypothetical protein DKFZp762O076	51.97
	409557	BE182896	Hs.76064	ESTs	51.64
125	420301	AA767526	Hs.40527	paired box gene 5 (B-cell lineage specifi	51.42
	414403	AW969551	Hs.54277	ribosomal protein L27a	50.58
130	452958	AA883929	Hs.5003	ESTs	50.21
	458997	AW937420	Hs.153203	ESTs	49.97
135	458079	AI796870	Hs.172665	DNA segment on chromosome X (unique) 992	49.85
	435905	AW997484	Hs.63187	KIAA0456 protein	48.76
140	424800	AL035588	Hs.99807	MyoD family inhibitor	48.33
	426827	AW067805	Hs.94262	methylene tetrahydrofolate dehydrogenase	47.91
145	408548	AA055449	Hs.82127	ESTs, Weakly similar to ALUC_HUMAN !!!	47.45
	420000	AB036063	Hs.25999	p53-inducible ribonucleotide reductase s	46.52
150	419485	AA489023	Hs.237825	ESTs, Weakly similar to unnamed protein	45.79
	451134	AA318315	Hs.82127	hypothetical protein FLJ22195	45.52
155	430066	AI929659	Hs.25010	signal recognition particle 72kD	45.45
	417427	M90391	Hs.108646	interleukin 16 (lymphocyte chemoattracta	44.58
160	450447	AF212223	Hs.53563	hypothetical protein P15-2	43.36
	446019	AI362520	Hs.156114	histone deacetylase 3	43.03
165	430015	AW768399	Hs.145053	ESTs	42.45
	446880	AI811807	Hs.33074	ESTs	42.36
170	409327	L41162	Hs.190537	Homo sapiens cDNA FLJ14934 fis, clone PL	42.30
	425390	AI092634	Hs.156114	collagen, type IX, alpha 3	41.42
175	411088	BE247593	Hs.145053	protein tyrosine phosphatase, non-recept	41.21
	408527	AL135018	Hs.33074	ESTs	40.94
180	441590	AI623207	Hs.190537	Homo sapiens, clone IMAGE:3606519, mRNA,	40.66
				ESTs	

	457465	AW301344	Hs.122908	DNA replication factor	39.91
	430280	AA361258	Hs.237868	interleukin 7 receptor	38.91
	410700	AA352335	Hs.65641	hypothetical protein FLJ20073	38.70
5	421282	AA286914	Hs.40782	ESTs	38.55
	448275	BE514434	Hs.20830	kinesin-like 2	38.00
	453912	AL121031		SWI/SNF related, matrix associated, acti	37.94
	414844	AA296874	Hs.77494	deoxyguanosine kinase	37.88
	421305	BE397354	Hs.324830	diphtheria toxin resistance protein requi	37.70
	439352	BE614347	Hs.169615	hypothetical protein FLJ20589	37.64
10	409078	AW327515		ESTs	37.30
	449845	AW971183	Hs.6019	DnaJ (Hsp40) homolog, subfamily C, membe	37.27
	444184	T87841	Hs.282990	Human DNA sequence from clone RP1-28H20	37.21
	445819	A1767472	Hs.146290	ESTs, Weakly similar to putative p150 [H	37.21
15	451418	BE387790	Hs.26369	hypothetical protein FLJ20287	37.00
	433226	AW503733	Hs.9414	KIAA1488 protein	36.88
	445784	AJ253155	Hs.146065	ESTs	35.36
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	33.09
	407756	AA116021	Hs.38260	ubiquitin specific protease 18	32.05
	447937	AL109715	Hs.20034	Homo sapiens mRNA full length insert cDN	31.00
20	438549	BE386801	Hs.21858	trinucleotide repeat containing 3	30.76
	429083	Y09397	Hs.227817	BCL2-related protein A1	30.73
	444670	H58373	Hs.332938	hypothetical protein MGC5370	28.45
	446839	BE091926	Hs.16244	mitotic spindle coiled-coil related prot	27.62
	433576	BE080715	Hs.161091	ESTs	27.42
25	422173	BE385828	Hs.250619	phorbol-like protein MDS019 (CEM15)	27.36
	408962	BE386436	Hs.44317	SRY (sex determining region Y)-box 10	26.66
	442757	A1739528	Hs.28345	ESTs	25.94
	414646	AA353776	Hs.901	CD48 antigen (B-cell membrane protein)	25.39
30	433675	AW977653	Hs.75319	ribonucleotide reductase M2 polypeptide	24.55
	438461	AW075485	Hs.286049	phosphoserine aminotransferase	22.48
	427581	NM 014788	Hs.179703	KIAA0129 gene product	22.15
	435256	AF193766	Hs.13872	cytokine-like protein C17	20.61
	409988	N27687	Hs.334334	transcription factor AP-2 alpha (activat	19.79
	444863	AW384082	Hs.104879	serine (or cysteine) proteinase inhibito	19.73
35	417404	NM 007350	Hs.82101	pleckstrin homology-like domain, family	19.27
	458098	BE550224		metallothionein 1E (functional)	18.09
	417018	M16038	Hs.80887	v-yes-1 Yamaguchi sarcoma viral related	16.95
	446054	AB014537	Hs.13604	KIAA0637 gene product	15.67
40	432606	NM 002104	Hs.3066	granzyme K (serine protease, granzyme 3;	15.54
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	15.06
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	14.89
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	14.84
	422486	BE514492	Hs.117487	gene near HD on 4p16.3 with homology to	14.61
45	424308	AW975531	Hs.154443	minichromosome maintenance deficient (S.	14.12
	421334	BE297729		gb:601175625F1 NIH_MGC_17 Homo sapiens c	13.94
	422423	AF283777	Hs.116481	CD72 antigen	13.77
	408996	AJ979168	Hs.344096	glycoprotein (transmembrane) nmb	13.33
	416406	D86961	Hs.79299	lipoma HMGIC fusion partner-like 2	12.76
	427536	BE277141	Hs.115803	gb:601178666F1 NIH_MGC_20 Homo sapiens c	12.76
50	423198	M81933	Hs.1634	cell division cycle 25A	12.66
	430770	AA765694	Hs.123296	ESTs	12.58
	407833	AW955632	Hs.66666	ESTs, Weakly similar to S19560 proline-r	12.09
	430822	AJ005371	Hs.248017	glyceraldehyde-3-phosphate dehydrogenase	11.46
55	424259	AK001776	Hs.143954	hypothetical protein FLJ10914	10.58
	446950	AA305800	Hs.5672	hypothetical protein AF140225	10.04
	420956	AA351584	Hs.100543	Homo sapiens clone 24505 mRNA sequence	9.98
	448356	AL120837	Hs.20993	high-glucose-regulated protein 8	9.88
	428799	AJ478619	Hs.104677	ESTs	9.56
60	437271	AL137445	Hs.28846	Homo sapiens mRNA; cDNA DKFZp566O134 (fr	9.03
	447769	AW873704	Hs.320831	Homo sapiens cDNA FLJ14597 fis, clone NT	9.01
	408393	AW015318	Hs.23165	ESTs	8.99
	407966	AA295052	Hs.38516	Homo sapiens, clone MGC:15887, mRNA, com	8.99
	450534	AJ570189	Hs.25132	KIAA0470 gene product	8.91
65	410101	AJ338045	Hs.203559	hypothetical protein FLJ12701	8.90
	417129	AJ381800	Hs.300684	calcitonin gene-related peptide-receptor	8.86
	453507	AF083217	Hs.33085	WD repeat domain 3	8.68
	442739	NM 007274	Hs.8679	cytosolic acyl coenzyme A thioester hydr	8.46
	456249	AJ206144	Hs.82508	HRHFB2206 protein	8.38
70	437786	BE142681	Hs.155573	polymerase (DNA directed), eta	8.35
	448410	AK000227	Hs.21126	hypothetical protein FLJ20220	8.20
	442711	AF151073	Hs.8645	hypothetical protein	8.14
	408405	AK001332	Hs.44672	hypothetical protein FLJ10470	7.96
	420208	BE276055	Hs.95972	silver (mouse homolog) like	7.88
75	415929	AA724373	Hs.49344	hypothetical protein FLJ11006	7.79
	449217	AA278536	Hs.23262	ribonuclease, RNase A family, k6	7.66
	451239	H24302	Hs.23127	ESTs	7.50
	442426	AJ373062	Hs.332938	hypothetical protein MGC5370	7.40
	447233	AW245333	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	7.39
80	439574	AJ469788		ESTs	7.13
	431360	NM 000427	Hs.251680	toricrin	7.12
	412438	AJ087928	Hs.110741	ESTs	6.96
	452882	AW972990	Hs.196270	folate transporter/carrier	6.87
	436581	AA725726	Hs.180213	ESTs	6.64

5	431317	AA502682		gb:ng23d01.s1 NC1_CGAP_Ov2 Homo sapiens	6.63
	443264	BE221477	Hs.132137	ESTs, Moderately similar to A47582 B-cel	6.58
	412490	AW803564	Hs.268850	Homo sapiens cDNA: FLJ22528 ts, clone H	6.53
	408367	AK001178	Hs.44424	homolog of rat orphan transporter v7-3	6.52
	413283	R78569	Hs.23756	hypothetical protein similar to swine ac	6.50
	453878	AW964440	Hs.19025	DC32	6.48
	424148	BE242274	Hs.1741	integrin, beta 7	6.44
	407876	NM 004519	Hs.40866	potassium voltage-gated channel, KQT-like	6.44
	409512	AW979187	Hs.293591	melanoma differentiation associated prot	6.39
10	427951	AI826125	Hs.43546	ESTs	6.32
	448664	AI879317	Hs.334691	splicing factor 3a, subunit 1, 120kD	6.03
	416640	BE262478	Hs.79404	neuron-specific protein	6.01
	446830	BE179030		Human DNA sequence from clone RPS-1174N9	5.98
	452629	WQ2772	Hs.180178	Homo sapiens, clone IMAGE:3947276, mRNA,	5.93
15	427390	AI432163	Hs.268231	Homo sapiens cDNA: FLJ23111 ts, clone L	5.73
	427853	AI569798	Hs.98260	ESTs	5.55
	434398	AA121098	Hs.3838	serum-inducible kinase (SIK)	5.54
	450256	AA265887	Hs.24724	MFH-amplified sequences with leucine-ric	5.54
	428524	AA429772		ESTs	5.53
20	431797	BE169641	Hs.270134	hypothetical protein FLJ20280	5.50
	418403	O86978	Hs.84790	KIAA0225 protein	5.50
	411524	AW850303		gb:IL3-CT0219-191199-030-F09 CT0219 Homo	5.47
	426158	NM 001982	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	5.40
	443086	AW977125		sine oculis homeobox (Drosophila) homolo	5.38
25	447735	AA775268	Hs.6127	Homo sapiens cDNA: FLJ23020 ts, clone L	5.38
	406843	AW196933	Hs.119598	ribosomal protein L3	5.36
	430594	AK000790	Hs.246885	hypothetical protein FLJ20783	5.35
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	5.23
	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA sequence	5.23
30	420338	AA825595	Hs.88269	Homo sapiens, clone MGC:17339, mRNA, com	5.09
	409264	NM 014937	Hs.52463	KIAA0966 protein	5.03
	414734	AA151712	Hs.82572	ESTs	5.01
	426759	AI590401	Hs.21213	ESTs	4.99
	426793	X89887	Hs.172350	HIR (histone cell cycle regulation defec	4.98
35	428612	AA770001		ESTs	4.97
	413550	W03011	Hs.306881	MSTP043 protein	4.92
	447349	AI375546		gb:tc23d04.x1 Soares_total_fetus_Nb2HF8_	4.86
	403328			Target Exon	4.85
40	452840	AI097393	Hs.43481	hypothetical protein DKFZp564K192	4.83
	439310	AF086120	Hs.102793	ESTs	4.82
	451281	AI768965	Hs.292708	ESTs	4.82
	431183	NM 006855	Hs.250696	KDEL (Lys-Asp-Glu-Leu) endoplasmic retic	4.81
	427871	AW992405	Hs.59622	Homo sapiens, clone IMAGE:3507281, mRNA,	4.74
	435963	AF271212	Hs.322901	disrupter of silencing 10	4.67
45	418899	BE539639	Hs.173030	ESTs, Weakly similar to ALU8_HUMAN ALU S	4.66
	414770	BE257224		Homo sapiens, clone IMAGE:3873720, mRNA	4.66
	419628	H67546	Hs.49768	ESTs	4.64
	420258	AA477514	Hs.96247	translin-associated factor X	4.63
50	446341	AL040763	Hs.310735	ESTs, Moderately similar to ALU7_HUMAN A	4.58
	420267	N37030	Hs.173337	ESTs	4.57
	412228	AW503785	Hs.73792	complement component (3d/Epstein Barr vi	4.55
	432888	T86823		gb:yd81a08.s1 Soares fetal liver spleen	4.55
	453258	AW293134	Hs.32597	ring finger protein (C3H2C3 type) 6	4.53
55	418340	NM 013286	Hs.84162	chromosome 3p21.1 gene sequence	4.50
	409038	T97490	Hs.50002	small inducible cytokine subfamily A (Cy	4.44
	447484	AA464839	Hs.292566	hypothetical protein FLJ14697	4.42
	452036	NM 003966	Hs.27521	sema domain, seven thrombospondin repeat	4.41
	406903	K03121		gb:Human glyceraldehyde-3-phosphate dehy	4.40
60	405451			dihydropyrimidinase-like 3	4.34
	434203	BE262677	Hs.283558	hypothetical protein PRO1855	4.33
	450088	AW292933	Hs.254110	ESTs	4.31
	421535	AB002359	Hs.105478	phosphoribosylformylglycinamide syntha	4.31
	415912	H08859	Hs.206469	ESTs, Weakly similar to ALU6_HUMAN ALU S	4.30
65	451259	NM 006052	Hs.26146	Down syndrome critical region gene 3	4.29
	452548	AL050321	Hs.301532	CRP2 binding protein	4.28
	432195	AI243669	Hs.8127	KIAA0144 gene product	4.24
	445101	T75202	Hs.12314	Homo sapiens mRNA; cDNA DKFZp586C1019 (I	4.22
	425913	AA365799		SEC22, vesicle trafficking protein (S. c	4.19
70	423494	AW504365	Hs.24143	Wiskott-Aldrich syndrome protein interac	4.18
	442092	AW578669		hypothetical protein FLJ12439	4.16
	424954	NM 000546	Hs.1846	tumor protein p53 (Li-Fraumeni syndrome)	4.05
	427719	AI393122	Hs.134726	ESTs	4.04
	415310	R16313		gb:yr93h09.r1 Soares infant brain 1N1B H	4.04
75	416058	L08895	Hs.78995	MADS box transcription enhancer factor 2	4.03
	427828	AI024471	Hs.98232	ESTs	3.93
	410079	U94362	Hs.58589	glycogenin 2	3.92
	420265	AA766209	Hs.88087	ESTs	3.92
	426181	AA371422	Hs.334371	hypothetical protein MGC13096	3.90
80	431639	AK000680	Hs.266175	phosphoprotein associated with GEMs	3.89
	410275	U85658	Hs.61796	transcription factor AP-2 gamma (activat	3.88
	422150	AI867118		catpactatin	3.87
	429238	NM 002849	Hs.198288	protein tyrosine phosphatase, receptor I	3.86
	418827	BE327311	Hs.47166	HT021	3.84

	425050	BE391854	Hs.7970	gb:601285394F1 NIH_MGC_44 Homo sapiens c	3.82
	442271	AF000552	Hs.8180	syndecan binding protein (syntenin)	3.81
	410235	AA082877		gb:zn07h10.1 Stratagene hNT neuron (937	3.79
5	408636	BE294925	Hs.45680	CGI-12 protein	3.78
	424624	AB032947	Hs.151301	Ca2+-dependent activator protein for secr	3.76
	411400	AA311919	Hs.69851	nucleolar protein family A, member 1 (H	3.74
	458215	AA928160		gb:zn86f10.s1 Soares_NFL_T_GBC_S1 Homo s	3.73
	452874	AK001061	Hs.30925	hypothetical protein FLJ10199	3.72
	442643	U82756		PRP4/STK/WD splicing factor	3.70
10	447471	AF039843	Hs.18676	sprouty (Drosophila) homolog 2	3.70
	447644	AW861622	Hs.108646	Homo sapiens cDNA FLJ14934 fs, clone PL	3.67
	422616	BE300330	Hs.118725	selenophosphate synthetase 2	3.64
	433160	AW207002	Hs.134342	TASP for testis-specific adriamycin sens	3.64
	418180	BE618087	Hs.83724	hypothetical protein MGC5466	3.62
15	423032	AJ684746	Hs.119274	RAS p21 protein activator (GTPase activa	3.62
	425569	AA359597	Hs.301701	Homo sapiens cDNA FLJ12073 fs, clone HE	3.62
	412156	H29487	Hs.17110	Homo sapiens mRNA; cDNA DKFZp434C2016 (I	3.61
	417426	NM 002291	Hs.82124	laminin, beta 1	3.61
	407188	AA457592		gb:aa92f11.s1 Stratagene fetal retina 93	3.61
20	426600	NM 003378	Hs.171014	VGF nerve growth factor inducible	3.61
	440760	AK001145	Hs.284216	hypothetical protein FLJ10283	3.60
	448481	W15284	Hs.74832	ESTs	3.59
	414111	BE047679	Hs.152982	hypothetical protein FLJ13117	3.59
25	437862	AW978107	Hs.5884	Homo sapiens mRNA; cDNA DKFZp586C0224 (I	3.59
	409703	NM 006187	Hs.56009	Z'-5'-oligoadenylate synthetase 3 (100 k	3.59
	406981	S71129		acetylcholinesterase (YT blood group)	3.59
	431586	AW971100	Hs.293189	ESTs	3.58
	415173	AW501735	Hs.180059	ESTs	3.57
30	430512	AF182294	Hs.241578	U6 snRNA-associated Sm-like protein LSM8	3.57
	446126	AW085909		pleckstrin homology domain interacting p	3.57
	409305	AA070078		gb:zm60f05.r1 Stratagene fibroblast (937	3.57
	433867	AK000596	Hs.3618	hippocalcin-like 1	3.56
	459721	AJ299050	Hs.143835	gb:qn14d12.x1 NCI_CGAP_Lu5 Homo sapiens	3.56
	414142	AI393657	Hs.159750	ESTs	3.55
35	416114	AJ695549	Hs.183868	glucuronidase, beta	3.55
	454870	AW836081		gb:PMO-LT0019-090300-002-e11 LT0019 Homo	3.54
	443105	X96753	Hs.9004	chondroitin sulfate proteoglycan 4 (meta	3.53
	444680	AI186671	Hs.22670	ESTs	3.51
40	413949	AA316077	Hs.75639	Human TBI gene mRNA, 3' end	3.51
	437033	AW248364	Hs.5409	RNA polymerase I subunit	3.50
	412141	AI183838	Hs.48938	hypothetical protein FLJ21802	3.49
	437158	AW090198		KIAA1150 protein	3.48
	432642	BE297635	Hs.3069	heat shock 70kD protein 9B (mortalin-2)	3.47
45	440634	AA921767	Hs.132447	ESTs	3.47
	445652	AL117473	Hs.13035	DKFZP727A071 protein	3.46
	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotoxic)	3.43
	420460	AA262331	Hs.48376	Homo sapiens clone HB-2 mRNA sequence	3.43
	426141	C05886	Hs.293972	ESTs	3.40
50	424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	3.40
	449209	BE616830	Hs.294145	ESTs	3.39
	408304	AW810279		gb:MR4-ST0125-151299-029-a09 ST0125 Homo	3.37
	416561	D87328	Hs.79375	holocarboxylase synthetase (biotin-l-prop	3.35
	422947	AA306782	Hs.122552	G-2 and S-phase expressed 1	3.34
55	453005	AW055308	Hs.31803	ESTs, Weakly similar to N-WASP (Hsapien	3.34
	409430	R21945	Hs.346735	splicing factor, arginine/serine-rich 5	3.32
	417386	AL037228	Hs.82043	D123 gene product	3.32
	440999	AJ951562	Hs.126370	ESTs, Weakly similar to CNE3_HUMAN COPIN	3.31
	407516	X64974		gb:H.sapiens mRNA HTPCRH02 for olfactory	3.31
60	450065	AI050107	Hs.24341	transcriptional co-activator with PDZ-bl	3.31
	416902	AA375634	Hs.288974	hypothetical protein FLJ12528	3.28
	432878	BE386490	Hs.279663	Pirin	3.28
	443296	AI765286	Hs.313342	ESTs	3.27
	429954	AJ918130	Hs.21374	ESTs	3.25
65	428044	AA093322	Hs.301404	RNA binding motif protein 3	3.25
	425317	AW205118	Hs.210546	interleukin 21 receptor	3.25
	418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	3.25
	432917	NM 014125	Hs.241517	PRO0327 protein	3.24
	447871	BE297946	Hs.239052	ESTs	3.24
70	414829	AA321568	Hs.77436	pleckstrin	3.24
	426996	AW968934	Hs.173108	Homo sapiens cDNA: FLJ21897 fs, clone H	3.23
	416188	BE157260	Hs.79070	v-myc avian myelocytomatosis viral onco	3.22
	429530	AA454191	Hs.99362	Human DNA sequence from clone RP11-530N1	3.21
	445174	AV652850	Hs.172004	titin	3.19
75	459227	AW167599		ESTs	3.19
	439039	AI656707	Hs.48713	ESTs	3.15
	418803	U50079	Hs.88556	histone deacetylase 1	3.15
	420005	AW271106	Hs.133294	ESTs	3.15
	422511	AJ076442	Hs.117938	collagen, type XVII, alpha 1	3.14
80	452480	AJ903526		gb:RC-BT031-090199-063 BT031 Homo sapien	3.14
	445701	AF055581	Hs.13131	lymphocyte adaptor protein	3.14
	410678	BE540516	Hs.293732	hypothetical protein MGC3195	3.14
	458664	AI300427		gb:qp18h07.x1 NCI_CGAP_Lu5 Homo sapiens	3.13
	436315	BE390513	Hs.27935	hypothetical protein MGC4837	3.13

	430441	BE398091		desmoplakin (DPI, DPII)	3.12
	435080	AI831760	Hs.155111	hypothetical protein FLJ14428	3.12
	425606	U52112	Hs.158331	renin-binding protein	3.11
	432978	AF126743	Hs.279884	DNAJ domain-containing	3.11
5	452826	BE245285	Hs.301636	peroxisomal biogenesis factor 6	3.10
	446627	AI973016	Hs.15725	hypothetical protein SBB48	3.10
	427647	W19744	Hs.180059	Homo sapiens cDNA FLJ20653 fs, clone KA	3.09
	417211	T97617	Hs.269092	ESTs	3.08
	448140	AF146761	Hs.20450	BCM-like membrane protein precursor	3.08
10	448752	AA593867	Hs.300842	KIAA1608 protein	3.07
	416355	H49875	Hs.268906	ESTs	3.07
	425345	AU077297	Hs.155894	protein tyrosine phosphatase, non-recept	3.07
	410321	Y12860	Hs.62245	solute carrier family 25 (mitochondrial	3.07
	411395	AA899673	Hs.7542	KIAA1802 protein	3.07
15	416065	BE267931	Hs.78996	proliferating cell nuclear antigen	3.06
	432343	NM 002960	Hs.2961	S100 calcium-binding protein A3	3.06
	457991	BE539951	Hs.306996	Homo sapiens, clone IMAGE:3447073, mRNA,	3.05
	433201	AB040896	Hs.21104	KIAA1463 protein	3.03
	416178	AB085527	Hs.192822	serologically defined breast cancer anti	3.02
20	411975	AI916058	Hs.144583	ESTs	3.01
	448719	AA033627	Hs.21858	trinucleotide repeat containing 3	3.00
	419870	AW403911	Hs.266175	phosphoprotein associated with GEMs	3.00
	409601	AF237621	Hs.80828	keratin 1 (epidermolytic hyperkeratosis)	2.94
	415668	AW957684	Hs.306814	hypothetical protein FLJ21889	2.93
25	453256	AI565587	Hs.32556	KIAA0379 protein	2.81
	436856	AI469355	Hs.127310	ESTs	2.75
	417880	BE241595	Hs.82848	selectin L (lymphocyte adhesion molecule	2.60
	408209	NM 004454	Hs.43697	ets variant gene 5 (ets-related molecule	2.59
	440457	BE387593	Hs.21321	Homo sapiens clone FLB9213 PRO2474 mRNA,	2.55
30	415314	N88802	Hs.5422	glycoprotein M6B	2.51
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	2.50
	424085	NM 002914	Hs.139226	replication factor C (activator 1) 2 (40	2.48
	410600	AW575742		ESTs, Moderately similar to S65657 alpha	2.48
	439180	AI393742	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	2.43
35	444809	BE207568	Hs.208219	ocutospinin	2.39
	453837	AI138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	2.39
	410290	AA023307	Hs.322844	hypothetical protein DKFZp564A176	2.37
	411358	R47479	Hs.94761	KIAA1691 protein	2.35
	427550	BE242818	Hs.311609	nuclear RNA helicase, DECD variant of DE	2.34
40	426312	AF026939	Hs.181874	interferon-induced protein with tetrati	2.29
	448569	BE382657	Hs.21486	signal transducer and activator of trans	2.27
	418661	NM 001949	Hs.1189	E2F transcription factor 3	2.24
	459373	BE408266	Hs.301406	hypothetical protein PP3501	2.21
45	417437	U52682	Hs.82132	interferon regulatory factor 4	2.21
	436700	AI693690	Hs.301406	hypothetical protein PP3501	2.18
	450690	AA296696	Hs.333418	FXD domain-containing ion transport reg	2.15
	432800	BE391046	Hs.278962	AIM-1 protein	2.15
	421773	W69233	Hs.112457	ESTs	2.09
50	409415	AA579258	Hs.6083	Homo sapiens cDNA: FLJ21028 fs, clone C	2.03
	433364	AI075407	Hs.296083	ESTs, Moderately similar to I54374 gene	2.02
	412609	Z48804	Hs.74124	ocular albinism 1 (Nettleship-Falls)	2.01
	443950	NM 001425	Hs.9999	epithelial membrane protein 3	2.01
	451537	R56631	Hs.26550	retinoid X receptor, gamma	2.00
55	427080	AW068287	Hs.301175	ras-related G3 botulinum toxin substrate	1.96
	413190	AA151802	Hs.40368	adaptor-related protein complex 1, sigma	1.94
	412926	AI879076	Hs.75061	macrophage myristoylated alanine-rich C	1.91
	453779	N35187	Hs.43388	28kD interferon responsive protein	1.86
	453107	NM 016113	Hs.279746	vanilloid receptor-like protein 1	1.86
	430637	BE160081	Hs.256290	S100 calcium-binding protein A11 (calgiz	1.86
60	408561	AI308037	Hs.84120	hypothetical protein MGC13016	1.84
	413171	AA318325	Hs.75219	tyrosinase-related protein 1	1.83
	406016			Target Exon	1.82
	445644	NM 003272	Hs.15791	transmembrane 7 superfamily member 1 (up	1.81
	431836	AF178532	Hs.271411	beta-site APP-cleaving enzyme 2	1.77
65	439496	BE615501	Hs.32343	Homo sapiens, Similar to RIKEN cDNA 1110	1.77
	447604	AW089933	Hs.301342	hypothetical protein MGC4342	1.76
	438866	U44385	Hs.325495	tissue inhibitor of metalloproteinase 2	1.74
	440672	AF083811	Hs.7345	MAD1 (mitotic arrest deficient, yeast, h	1.70
70	416091	AF295370	Hs.283082	defensin, beta 3	1.69
	446291	BE397753	Hs.14623	interferon, gamma-inducible protein 30	1.67
	422532	AL008726	Hs.118126	protective protein for beta-galactosidas	1.67
	418918	X07871	Hs.89476	CD2 antigen (p50), sheep red blood cell	1.67
	412580	AA113262	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	1.67
75	448258	BE386983	Hs.343214	hypothetical protein FLJ20396	1.66
	414945	BE076358	Hs.77667	lymphocyte antigen 6 complex, locus E	1.66
	425262	D87119	Hs.155418	GS3955 protein	1.65
	439237	AW408158	Hs.318893	ESTs, Weakly similar to A47582 B-cell gr	1.64
	427923	AW274357	Hs.301406	hypothetical protein PP3501	1.63
80	424825	AF207069	Hs.153357	procollagen-lysine, 2-oxoglutarate 5-dio	1.62
	441859	AW194364	Hs.94814	interleukin-4 induced gene-1 protein (FI	1.60
	445982	BE410233	Hs.13501	pescadillo (zebrafish) homolog 1, contai	1.58
	412939	AW411491	Hs.75069	eukaryotic translation elongation factor	1.58
	417237	H86385	Hs.81737	palmitoyl-protein thioesterase 2	1.56

5	412856	BE386745	Hs.74631	basigin (OK blood group)	1.56
	447200	BE543146	Hs.281434	Homo sapiens cDNA FLJ14028 fis, clone HE	1.54
	409614	BE297412	Hs.55189	hypothetical protein	1.53
	450663	H43540	Hs.25292	ribonuclease H1, large subunit	1.53
	423397	NM 001838	Hs.1652	chemokine (C-C motif) receptor 7	1.49
	425535	AB007937	Hs.158287	KIAA0468 gene product	1.48
	409340	BE174629	Hs.321130	hypothetical protein MGC2771	1.46
	446755	AW451473	Hs.16134	serine/threonine kinase 10	1.46
	454429	BE273437	Hs.301406	hypothetical protein PP3501	1.46
10	425722	AI659076	Hs.97031	hypothetical protein MGC13047	1.45
	414509	AW161311	Hs.76294	CD63 antigen (melanoma 1 antigen)	1.44
	452203	X57522		transporter 1, ATP-binding cassette, sub	1.43
	436378	AJ227874	Hs.99244	ESTs	1.42
	424218	AF031824	Hs.143212	cystatin F (leukocystatin)	1.42
15	436456	AW292677	Hs.248122	G protein-coupled receptor 24	1.42
	439740	AI365512	Hs.6657	hypothetical protein tk1048E9.5	1.42
	429359	W00482	Hs.2399	matrix metalloproteinase 14 (membrane-in	1.42
	427634	AI399745	Hs.18449	hypothetical protein MGC10820	1.40
20	403409			NM_005929:Homo sapiens antigen p97 (meta	1.40
	434262	AF121858	Hs.12169	sorting nexin 8	1.34
	413566	AW604451	Hs.285814	sprouty (Drosophila) homolog 4	1.32
	427730	AW250549	Hs.180577	granulin	1.32
	411742	AW247593	Hs.71819	eukaryotic translation initiation factor	1.31
	450395	BE048545	Hs.161757	ESTs	1.30
25	413291	NM 006278	Hs.75268	sialyltransferase 4C (beta-galactosidase	1.26
	442609	AL020996	Hs.8518	selenoprotein N	1.24
	416929	N20535		metastatin 1	1.21
	421975	AW961017	Hs.6459	hypothetical protein FLJ11856	1.21
	454478	AW805749		superoxide dismutase 2, mitochondrial	1.20
30	437723	AI672731	Hs.13256	ESTs	1.18
	416350	AF188625	Hs.189507	phospholipase A2, group IID	1.08
35	TABLE 48B:				
	Pkey:	Unique Eos probeset identifier number			
	CAT number:	Gene cluster number			
	Accession:	Genbank accession numbers			
40	Pkey	CAT Number	Accession		
	430540	713_2	BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418		
			BM045810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847		
			AJ770171 BF196861 BE856897 AA463876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399		
			AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567		
			BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610		
45			BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420		
			BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296		
			AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953		
			BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512		
			W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069		
50			F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114		
			AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814435 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103		
			AW008188 R07703 AA989120 AA746235 AW026983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809		
			BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591		
	454088	1007145_1	AW062425 AW062411		
55	458997	11847_4	BM453041 AA760783 BE218582 AI340046 AW166131 BF515854 AI530296 AA461307 AI090881 AW023059 AA155797 AA115486 AI597396		
			AW889004 AW937420 AA137082 AA013374 BG619478 BG401839		
	446019	658727_1	AK362520 D25917 AI670784 AI742347 AW269789 AI270700 AW610541 AW793036 AW793035 AW610540 AW362220 AW362166 AW362214		
			AW362225 AW362228 AL119827		
60	430015	713_2	BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418		
			BM045810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847		
			AJ770171 BF196861 BE856897 AA463876 AI375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399		
			AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567		
			BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610		
			BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420		
65			BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296		
			AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953		
			BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512		
			W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069		
			F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114		
70			AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814435 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103		
			AW008188 R07703 AA989120 AA746235 AW026983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809		
			BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591		
	453912	32562_3	BM472224 BI966849 BI966735 AW973032 BI967894 BI963048 AA548765 AI926504 AA041551 AW043754 AI086702 AW008105 AA974849 AW614893		
			AA553737 AA916996 AW262982 AI580991 BF726843 AV693312 W35325 AA039927 BG460936 AW388482 AW388420 BF374777 W01360 N94710		
			H87967		
75	409078	744783_1	AW327515 AW327774 AW327571		
	458098	23945_1	AI082245 BE467534 AI797130 BE467063 BE467767 BE218421 AI694996 BE327781 BE327407 BE833829 AA589054 AA459718 BE833855 BE550224		
			AA832519 AF086393 AV733386 BE465409 N29245 W07677 AA482971 BE503548 H18151 AA461301 W79223 W74510 AI090689 AL600773 AL600781		
			NA8003 R28075 R34182 BE071550 AW885857 AI276145 AI276696 H97808 N20540 AI468553		
80	421334	267495_1	BG758353 AA287401 BE295646 AL040858		
	439574	689966_1	BG532820 AW246001 AI469788 AI350090 AI446768 BE549330 W84852 AA837988		
	431317	997174_1	AW970601 AW613399 AA503435 AA502682 N91138		

446830	41421_1	BC020595 B1488430 BG168023 BE179030 AW294203 BF849776 AA459064 A917452 AW403072 W27419 BF914568 BF798468 AW370558 T35055 AW370623 AA399232 AA214221 AW802987 BF902228 AW370622 BF819597 AW370567 BF914313 AW954040 BF060706 AA194237 T25074 C01285 B1489433
5	428524 1382184_1 411524 1089114_1 443086 25669_4 428612 1383189_1 447349 1063443_1 414770 41721_1	A1208080 AA442862 AA429772 AW850587 AW850589 AW850318 AW850303 BE896316 BG819393 AA187888 AW753122 AA770001 AA431112 AA432126 BE743847 AW809603 BM469626 A135546 AK056926 BG473673 BG482256 AL135566 AW419211 BF949370 AL120313 AV703730 H82569 BG012696 R27084 AA304583 BM452908 BF516419 BF515687 BG036572 BG696740 AW953552 AW859437 AA306038 A1754064 AA608729 AA664163 H65119 AW272606 BF942099 AW130468 B1089467 BG821499 AA152403 BF310450 BF314240 BG830310 BF803223 BG764269 BE542645 BE259142 R26953 BE257224 BG475461 BF677821 R33048
10	432888 2155976_1 425913 4123_2	T86823 AA570737 A1821425 AA569589 A1732232 AV703649 AW959818 A1582119 A1523459 A1674473 AW663543 AA825476 A1935231 BF742805 AA426156 A1253626 AA846477 A1024230 BF221760 A1493027 AW006841 AA814699 H99650 A1088977 AA442691 A1783526 BF207915 A1752847 AA782635 A1978980 AA788634 BG119454 BF678528 A1627829 BG993975 AV701283
15	442092 22756_2 415310 1869807_1 422150 782_1	BM449821 BM069895 BM023170 AW025563 BG152606 BM023452 A1862106 BG959957 R16313 Z45351 R14838 F05290 R14821 R16277 BI086421 BF059136 AW003898 BF446659 A1632891 A1628067 A1703179 A1961149 BF111022 AW614154 BE674215 AA687350 AA779426 BF591963 AW243344 A1356530 A1492508 A1694049 A1090422 AA465307 A1273387 BE674525 AW271971 AA969153 AW468593 AA984014 A1817491 AA970258 A1914450 A1018697 AW577591 AW577616 AA382101 AW954455 A1867265 A1707995 A1337384 BF208406 BF037100 BF223433 BF195517 BE673584 BF224124 BE813387 BG036579 B1553906 AA304995 AW361269 AW754160 AW361276 AW361271 A1867118 AW805555 AW361284 AW954458 AW958551 BG681507 H79011 AW205696 AW134957 AA747667 AW753296 BF939060 AW958549 BF910827 BG573750 BG168639
20	410235 2930253_1 458215 540112_3 442643 2736_1	AA082977 AA082955 BE176902 BE177058 BC001588 BC007424 AF016369 NM_004697 B1756186 BE257019 BG500792 B1862776 AL121371 BG574833 AA703250 AA179511 AW052006 A1280150 A1914000 A1358319 A1081204 A1082594 AA992449 AA70821 A1655744 AW237529 AA678858 A1984430 BF433055 BE467594 BE467573 AA035630 A1289987 A1184802 A1681391 AW592416 A1138377 A1139266 AA961714 A1800163 AA418751 AW451928 AA686876 A1273444 AA94387 BE046912 A1276555 BF196021 AA700055 AA609305 AA772596 A1635758 A1635749 H95459 AW610290 BE464994 AA527136 BF374802 A1800175 AW195227 A1189676 BF802049 AL513632 AL554911 AL538845 BE297273 A1315321 BM451920 BE269268 BE292835 BE018128 BG755713 BM041095 BG677009 AL039691 BF995709 BE735588 BE296453 BG393609 BG824453 AL567522 A1745257 AW388641 AW301265 A1411144 AW029280 A1149362 A1152328 AA418960 AL121009 A1890398 AL528748 H13050 T47086 B1000575 BF334914 BF109661 R44450 H13259 T47087 AW388646 BF305834 AL577515 BM041600 BE889299 BF239768
25	446126 610_2	BF946219 BF946218 BF851494 AL536879 AA457150 A1590194 A1582629 AA464515 AA916242 AA337109 AA336509 N46906 AA336322 AA336407 AA337222 AA319240 B1026817 B1027058 AL536880 A1693827 AA651730 A1701013 BM068789 AW339506 AA293021 BF891108 A1458885 AW361203 AW974652 A1761251 A1655763 AA628063 BE047125 AW085916 A1129587 N52070 AW172361 AA052951 AW085909 A100008 AA962570 A1371342 A1364207 AA464514 A1962506 A1824603 AW376300 AA058439 AW361192 AV656660 N50282 BF820514 BF891008 H40784 BF891112 BE708029 AW043567 AA056762
30	409305 109927_1 454870 2170_9 437158 59575_1	AA071475 AA112236 AA070648 AA071243 AA081725 AA085187 AA070078 AW836081 BF854404 AW578594 AW578581 BF507971 AW196760 AA779923 AA707233 A1655913 AA948295 AW089222 AW291883 AL050068 AA160485 AW173544 AW296506 AW439860 A1521563 A1702529 A1933606 AW138323 AA570109 H19504 BM021968 BF063327 BF593552 AA530766 A1597717 A1807128 AA523012 A1356250 AW451057 A974203 A1762577 BF512552 AW007307 BE675286 AW450602 AA962057 AW516069 A1582546 BF221924 BF222543 A1801808 AW468599 AW000736 A1866625 AW235356 BM021837 AA911956 A1680606 W86516 T03370 AW611634 H41653 A1468349 H19588 AW090198 AW043993 J39847
35	408304 646409_1	AW810279 BE146684 AW810193 AW810515 AW178835 AW810516 BE146689 AW178842 BE146693 BE146694 AW810208 AW810258 AW810447 AW810443 AW810330 AW810211 AW810328 AW810327 AW810288 AW810265 AW810257 AW810263 AW810567 AW178838 AW810323 AW810358 AW810281 AW810321 AW178837 AW810635 BE062400 AW810198 AW810325 AW810513 BE062434 BE146679 AW810441 AW846649 AW810536 AW178857 AW810185 BE146653 AW810636 AW810322 BE146674 AW810359 AW810293 AW810472 AW178852 AW810356 AW810514 AW810289 BE146652 AW810566
40	459227 639802_1 452480 3144986_1 458664 2139033_1 430441 1438_6	AW167599 A1971179 A1934948 A1903574 A1903572 A1903526 A1903571 BF432937 R07053 A1300427 W57876 BG108218 BE560548 AW380115 BE269629 A1911518 AW380113 AA902964 AA455001 A1276529 A1685597 AA970496 D61084 AW380058 AW380080 R00283 C15236 AW327776 D80759
45	410600 497855_1 452203 2630_1	BF347859 AW499616 AA191322 AW499617 AL601010 AW575742 AA729043 BE463447 AA086179 BE549623 A1335824 AW408712 BM149172 BC014081 NM_000593 X57522 L21208 L21207 L21206 L21205 L21204 AL561404 AL546423 AL560492 AL556882 AL541576 AL550654 B1823519 B1770023 AL554969 B1489906 A1304693 AW295947 BM146642 X57521 BG820143 BE898390 F06770 F12630 BM423610 AL561518 BM009470 BG742981 AA279685 AA847441 AA313737 BF172639 BF897216 BF914190 BF903647 S70277 A1569694 AW073296 A1361433 AA564644 AA487429 BE858232 AA838610 A1539114 A1719375 A1829129 BG057675 A423422 A1158860 BE300655 AW170777 AA586956 A1571889 A1556850 A1576404 AL582800 B1256544 BF342301 BG875994 AA054458 AA353161 A1940434 BE816522 AL577636 A1479650 AW150377 A1154395 AW951271 A1032220 A1819778 A1346733 AW771150 AW512525 A1249904 AA279809 A1352549 AW512517 BG056280 AA521222 BE271141 AL581932 AL541575 B1819184 AV660190 AL556475 A1620020 AW089888 AW079179 Z21518 AA687601 F04651 A1783961 T57198 A1433367 T78652 A1554968 AA365648 AA582619 BE874601 BF804669 AL574458 BM145502 A1266514 A1538823 A1475626 AA948210 AA884054 AA487637 AA031844 AA535221 AW794256 AW361447 BE788505 A1682892 AA830989 AA862356 AA653084 BM009154 AA135727 H05927 H23433 R42244 W79997 AW366665 AW366601 AA678742 AL556474 AA135770 BE774050 BF914200 H88457 AA627746 B1560216 B1753586
50	416929 14596_3 454478 4273_16	BC017849 BC005892 N42983 BF691239 N42991 N29240 N40292 N33322 N33330 N20535 AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538
55	TABLE 48C: Pkey: Ref: Strand: N1_position:	Unique number corresponding to an Eos probe set Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495. Indicates DNA strand from which exons were predicted. Indicates nucleotide positions of predicted exons.
60	403328 8469086 405451 7622517 406016 8272661 403409 9438598	Minus 120428-120703 Minus 145949-146227 Plus 41341-41940 Plus 6860-7054, 12573-12771
65		
70		
75		
80		

TABLE 49A: ABOUT 1127 GENES UPREGULATED IN PRIMARY MELANOMA AND/OR MELANOMA METASTASES RELATIVE TO NORMAL BODY TISSUES

Table 49A lists about 1127 genes upregulated in primary melanoma and/or melanoma metastases relative to normal body tissues. These genes were selected from 59680 probesets on the Eos/Athymetrix HuD3 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

5	PKey:	Unique Eos probeset identifier number					
	ExAccn:	Exemplar Accession number, Genbank accession number					
	UnigeneID:	Unigene number					
	Unigene Title:	Unigene gene title					
	R1:	90th percentile of primary melanoma and melanoma metastasis AIs divided by the 90th percentile of normal tissue AIs					
10	R2:	90th percentile of primary melanoma and melanoma metastasis AIs divided by the 90th percentile of normal tissue AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator					
	R3:	90th percentile of primary melanoma and melanoma metastasis AIs divided by the 90th percentile of heart, liver, lung, and kidney AIs					
	PKey	ExAccn	UnigeneID	Unigene Title	R1	R2	R3
15	452838	U65011	Hs.30743	preferentially expressed antigen in mela	14.05	11.83	14.05
	426555	NM_000372	Hs.2053	tyrosinase (oculocutaneous albinism IA)	13.15	13.27	13.15
	430377	NM_001922	Hs.301865	dopachrome tautomerase (dopachrome delta	11.77	7.43	11.77
	420208	BE276055	Hs.95972	silver (mouse homolog) like	10.53	19.95	10.27
	431360	NM_000427	Hs.251680	loricrin	9.78	7.09	0.89
20	430822	AJ005371	Hs.248017	glycerate dehydro-3-phosphate dehydrogenase	9.40	7.20	8.84
	422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	8.03	10.27	12.84
	419628	H67546	Hs.49768	ESTs	7.56	8.92	6.49
	438549	BE386801	Hs.21858	trinucleotide repeat containing 3	7.52	5.47	16.47
	430686	NM_001942	Hs.2633	desmoglein 1	6.06	4.13	3.31
25	409601	AF237621	Hs.80828	keratin 1 (epidermolytic hyperkeratosis)	5.86	9.22	0.77
	429170	NM_001394	Hs.2359	dual specificity phosphatase 4	5.84	3.46	5.84
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	5.82	3.94	5.82
	414812	X72755	Hs.77367	monokine induced by gamma interferon	5.81	3.33	6.79
	453344	BE349075	Hs.44571	ESTs	5.78	3.07	5.98
30	425088	AA663372	Hs.169395	hypothetical protein FLJ12015	5.60	3.92	5.60
	402075			ENSP00000251056*-Plasma membrane calcium	5.12	4.22	5.12
	416975	NM_004131	Hs.1051	granzyme B (granzyme 2, cytotoxic T-lymp	5.09	3.33	4.14
	420602	AF060877	Hs.99236	regulator of G-protein signaling 20	5.06	5.78	5.06
	426600	NM_003378	Hs.171014	VEGF nerve growth factor inducible	5.04	6.77	9.42
35	430838	N46664	Hs.169395	hypothetical protein FLJ12015	5.03	3.06	5.03
	417542	J04129	Hs.82269	progesterone-associated endometrial prote	4.93	8.13	5.41
	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypothe	4.78	2.93	4.78
	408962	BE386436	Hs.44317	SRY (sex determining region Y)-box 10	4.75	3.28	5.30
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	4.70	3.11	4.70
40	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su	4.68	2.27	4.68
	407756	AA116021	Hs.38260	ubiquitin specific protease 18	4.65	3.21	3.31
	417166	AA431323	Hs.42146	ESTs	4.56	5.23	4.56
	421773	W69233	Hs.112457	ESTs	4.52	11.11	0.96
	442711	AF151073	Hs.8645	hypothetical protein	4.37	3.70	4.30
45	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	4.37	3.08	6.75
	428513	BE220806	Hs.184697	Homo sapiens clone 23785 mRNA sequence	4.32	2.61	4.32
	447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	4.31	3.13	4.31
	451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	4.28	2.89	2.17
50	433658	L03678	Hs.156110	immunoglobulin kappa constant	4.18	2.68	5.92
	420301	AA767526	Hs.22030	paired box gene 5 (B-cell lineage specif	4.16	2.57	4.16
	433447	U29195	Hs.3281	neuronal pentraxin II	4.15	2.26	6.46
	446341	AL040763	Hs.310735	ESTs, Moderately similar to ALU7_HUMAN A	4.10	4.04	4.64
	408380	AF123050	Hs.44532	dubiquitin	4.02	2.46	5.33
	421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	4.02	3.48	3.19
55	421633	AF121860	Hs.106260	sorting nexin 10	4.01	2.61	3.36
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	3.96	2.68	3.96
	417355	D13168	Hs.82002	endothelin receptor type B	3.95	2.46	3.66
	420267	N37030	Hs.173337	ESTs	3.88	3.87	3.88
	412228	AW503785	Hs.73792	complement component (3d/Epstein Barr vi	3.81	3.04	7.94
60	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S	3.79	2.23	3.79
	405451			dihydropyrimidinase-like 3	3.78	3.74	4.06
	449078	AK001256	Hs.22975	KIAA1576 protein	3.76	2.83	3.76
	423799	AW026300	Hs.132906	19A24 protein	3.75	2.36	3.75
	456373	BE247706	Hs.89751	membrane-spanning 4-domains, subfamily A	3.73	2.59	6.97
65	444863	AW384082	Hs.104879	serine (or cysteine) proteinase inhibito	3.72	2.15	3.92
	427666	A1791495	Hs.180142	calmodulin-like skin protein (CLSP)	3.69	4.17	1.18
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	3.64	2.08	3.64
	422423	AF283777	Hs.116481	CD72 antigen	3.64	2.94	3.64
	419956	AL137939	Hs.40096	cadherin 19, type 2	3.56	2.22	4.68
70	420338	AA825595	Hs.88269	Homo sapiens, clone MGC:17339, mRNA, com	3.55	2.96	4.70
	412140	AA219691	Hs.73625	RAB6 interacting, kinesin-like (rakines	3.54	1.96	3.54
	458079	A1796870	Hs.54277	DNA segment on chromosome X (unique) 992	3.53	2.18	3.27
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypothe	3.48	2.83	11.00
	449722	BE280074	Hs.23960	cyclin B1	3.48	2.10	4.64
75	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	3.47	3.90	4.98
	452744	A1267652	Hs.246107	Homo sapiens mRNA; cDNA DKFp434E082 (lr	3.45	2.38	3.45
	447210	AF035269	Hs.17752	phosphatidylserine-specific phospholipas	3.44	3.83	2.09
	428804	AK000713	Hs.193736	hypothetical protein FLJ20706	3.43	2.39	3.43
	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	3.41	4.33	5.41
80	423605	AF047826	Hs.129887	cadherin 19, type 2	3.40	1.97	4.06
	421508	NM_004833	Hs.105115	absent in melanoma 2	3.38	2.77	5.46
	428001	H97428	Hs.219907	ESTs, Moderately similar to Transforming	3.36	2.41	3.36
	430770	AA765694	Hs.123296	ESTs	3.36	2.08	3.83
	445784	A1253155	Hs.146065	ESTs	3.32	2.02	3.80



5	414646	AA353776	Hs.901	CD48 antigen (B-cell membrane protein)	3.32	1.87	3.76
	448966	AW372914	Hs.86149	phosphoinositol 3-phosphate-binding prot	3.31	2.10	3.31
	441224	AU076964	Hs.7753	calumenin	3.28	2.04	3.28
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	3.26	2.43	3.56
	413385	M34455	Hs.840	indoleamine-pyrole 2,3 dioxygenase	3.24	2.94	2.85
10	416636	N32536	Hs.42645	solute carrier family 16 (monocarboxylic	3.23	1.84	3.87
	415668	AW957684	Hs.306814	hypothetical protein FLJ21889	3.22	3.10	3.13
	442757	AJ739528	Hs.28345	ESTs	3.22	3.41	1.45
	426317	AA312350	Hs.169294	transcription factor 7 (T-cell specific,	3.18	2.50	3.18
	432874	W94322	Hs.279651	melanoma inhibitory activity	3.18	5.31	4.55
15	412561	NM_002286	Hs.74011	lymphocyte-activation gene 3	3.17	3.09	4.28
	443983	H04482	Hs.163724	ESTs	3.16	2.21	3.16
	429732	U20158	Hs.2488	lymphocyte cytosolic protein 2 (SH2 doma	3.14	1.74	3.25
	422353	T55979	Hs.115474	replication factor C (activator 1) 3 (38	3.14	2.07	3.33
	422424	A1185431	Hs.296638	prostate differentiation factor	3.10	3.20	2.15
20	435256	AF193766	Hs.13872	cytokine-like protein C17	3.10	2.23	3.10
	401747			Homo sapiens keratin 17 (KRT17)	3.10	2.10	3.02
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	3.08	3.08	4.00
	419870	AW400911	Hs.266175	phosphoprotein associated with GEMs	3.07	3.16	3.07
	432878	BE386490	Hs.279663	Pirin	3.06	2.92	4.20
25	401454			NM_014226~Homo sapiens renal tumor anti	3.05	1.96	3.05
	410079	U94362	Hs.58589	glycogenin 2	3.01	2.26	3.27
	426501	AW043782	Hs.293616	ESTs	3.01	2.00	3.68
	418310	AA814100	Hs.86893	ESTs	3.00	2.35	6.76
	422283	AW411307	Hs.114311	CDC45 (cell division cycle 45, S.cerevis	2.96	2.31	3.78
30	422309	U79745	Hs.114924	solute carrier family 16 (monocarboxylic	2.96	2.49	4.74
	408418	AW963897	Hs.44743	KIAA1435 protein	2.94	1.80	2.94
	432882	NM_013257	Hs.279696	serum/glucocorticoid regulated kinase-ii	2.93	1.74	2.93
	416640	BE262478	Hs.79404	neuron-specific protein	2.93	2.78	3.09
	443264	BE221477	Hs.132137	ESTs, Moderately similar to A47582 B-cel	2.92	2.35	4.27
35	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA sequence	2.91	2.83	3.84
	405545			Target Exon	2.90	2.44	2.90
	451537	R56631	Hs.26550	retinoid X receptor, gamma	2.90	4.09	3.40
	439926	AW014875	Hs.137007	ESTs	2.90	2.43	2.90
	406673	M34996	Hs.198253	major histocompatibility complex, class	2.89	3.22	1.44
40	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	2.89	3.90	2.89
	440065	W03476	Hs.266331	hypothetical protein MGCA595	2.89	4.40	3.05
	442739	NM_007274	Hs.8679	cytosolic acyl coenzyme A thioester hydr	2.88	2.36	4.54
	424620	AA101043	Hs.151254	kallikrein 7 (chymotrypsin, stratum corn	2.86	3.23	1.95
	407856	AA045281	Hs.266175	phosphoprotein associated with GEMs	2.84	1.84	2.84
45	430540	AW245422		Homo sapiens cDNA: FLJ22105 fs, clone H	2.84	1.80	2.92
	424153	AA451737	Hs.141496	MAGE-like 2	2.84	2.26	2.84
	420798	W93774	Hs.99936	keratin 10 (epidermolytic hyperkeratosis	2.81	2.91	0.83
	431317	AA502682		gb.ng23d01.s1 NCI_CGAP_Ov2 Homo sapiens	2.81	2.17	2.96
	424800	AL035588	Hs.153203	MyoD family inhibitor	2.80	2.06	4.10
50	448111	AA053486	Hs.20315	interferon-induced protein with tetratri	2.79	1.85	2.42
	431183	NM_006855	Hs.250696	KDEL (Lys-Asp-Glu-Leu) endoplasmic retic	2.78	2.34	6.53
	448719	AA033627	Hs.21858	trinucleotide repeat containing 3	2.78	3.75	4.01
	427951	AI826125	Hs.43546	ESTs	2.78	1.99	2.70
	453912	AL121031		SWI/SNF related, matrix associated, acti	2.77	2.28	2.77
55	426711	AA383471	Hs.343800	conserved gene amplified in osteosarcoma	2.75	1.98	2.75
	409430	R21945	Hs.346735	splicing factor, arginine/serine-rich 5	2.74	3.18	3.60
	409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA119	2.72	2.24	2.72
	442117	AW664964	Hs.128899	ESTs; hypothetical protein for IMAGE:447	2.72	2.31	3.59
	420552	AK000492	Hs.98806	hypothetical protein	2.72	1.85	2.72
60	409103	AF251237	Hs.112208	XAGE-1 protein	2.72	2.18	2.72
	439963	AW247529	Hs.6793	platelet-activating factor acetylhydrola	2.71	2.20	4.48
	413171	AA318325	Hs.75219	tyrosinase-related protein 1	2.71	5.74	2.62
	436700	AI693690	Hs.301406	hypothetical protein PP3501	2.71	3.37	3.32
	419098	AA234041	Hs.87271	ESTs	2.70	3.53	1.35
65	436608	AA628980	Hs.192371	down syndrome critical region protein DS	2.69	2.48	2.69
	418067	AJ127958	Hs.83393	cystatin E/M	2.68	3.04	0.56
	439453	BE264974	Hs.6566	thyroid hormone receptor interactor 13	2.67	2.36	3.16
	437723	AI672731	Hs.13256	ESTs	2.66	2.16	2.66
	411252	AB018549	Hs.69328	MD-2 protein	2.66	1.81	2.66
70	424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	2.66	2.43	3.92
	453837	AL138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	2.65	3.71	2.80
	434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	2.64	1.85	4.72
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	2.64	2.07	2.64
	444371	BE540274	Hs.239	forkhead box M1	2.64	2.82	4.46
75	436291	BE568452	Hs.344037	protein regulator of cytokinesis 1	2.63	1.81	2.95
	439310	AF086120	Hs.102793	ESTs	2.62	2.38	10.12
	420218	AW958037		ribosomal protein L4	2.62	2.80	2.62
	438746	AJ885815	Hs.184727	Human melanoma-associated antigen p97 (m	2.60	3.27	2.12
	432828	AB042326	Hs.287402	chondroitin 4-sulfotransferase	2.60	2.67	3.03
80	408367	AK001178	Hs.44424	homolog of rat orphan transporter v7-3	2.59	3.22	2.59
	408527	AL135018	Hs.33074	Homo sapiens, clone IMAGE:3606519, mRNA,	2.58	1.69	2.05
	444809	BE207568	Hs.208219	oculostearin	2.58	2.77	2.88
	432886	BE159028	Hs.279704	chromatin accessibility complex 1	2.58	1.83	2.58
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	2.55	3.70	3.28
	412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	2.55	2.14	1.62
	410174	AA306007	Hs.59461	DKFZP434C245 protein	2.55	2.07	2.55
	447735	AA775268	Hs.6127	Homo sapiens cDNA: FLJ23020 fs, clone L	2.54	2.17	4.01

5	422173	BE385828	Hs.250619	phorbol-like protein MDS019 (CEM15)	2.53	1.68	3.16
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	2.53	2.74	3.93
	437396	BE140396	Hs.21621	hypothetical protein DKFZp7620076	2.52	1.62	3.17
	448140	AF146761	Hs.20450	BCAM-like membrane protein precursor	2.51	2.67	1.88
	442426	AI373062	Hs.332938	hypothetical protein MGCS370	2.51	2.08	4.57
	417427	M90391	Hs.82127	interleukin 16 (lymphocyte chemoattractant)	2.51	1.74	2.68
	427581	NM_014788	Hs.179703	KIAA0129 gene product	2.51	1.67	2.24
	432800	BE391046	Hs.278962	AIM-1 protein	2.51	5.55	2.42
10	408996	AI979168	Hs.344096	glycoprotein (transmembrane) nmb	2.50	1.95	2.41
	410326	AI368909	Hs.47650	ESTs	2.50	2.85	2.63
	452833	BE559681	Hs.30736	KIAA0124 protein	2.50	3.14	3.07
	410016	AA297977	Hs.57907	small inducible cytokine subfamily A (Cy	2.49	3.38	2.91
	429083	Y09397	Hs.227817	BCL2-related protein A1	2.48	1.85	2.70
15	418460	M26315	Hs.85258	CD8 antigen, alpha polypeptide (p32)	2.48	2.33	2.99
	409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromoso	2.47	1.88	4.14
	412970	AB026436	Hs.177534	dual specificity phosphatase 10	2.46	2.00	0.98
	401780			NM_005557-Homo sapiens keratin 16 (foca	2.44	2.30	1.39
	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fis, clone PL	2.44	1.57	0.88
20	432606	NM_002104	Hs.3066	granzyme K (serine protease, granzyme 3;	2.42	1.91	2.56
	417880	BE241595	Hs.82848	selectin L (lymphocyte adhesion molecule	2.42	2.31	4.27
	415929	AA724373	Hs.49344	hypothetical protein FLJ11006	2.41	2.73	2.41
	415752	BE314524	Hs.78776	putative transmembrane protein	2.41	2.07	3.41
	409703	NM_006187	Hs.56009	2'-5'-oligoadenylate synthetase 3 (100 k	2.41	2.34	3.26
25	414004	AA737033	Hs.7155	ESTs, Moderately similar to 2115357A TYK	2.40	1.65	2.40
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	2.40	2.18	8.13
	410290	AA402307	Hs.322844	hypothetical protein DKFZp564A176	2.40	2.88	2.46
	403328			Target Exon	2.39	2.00	1.95
	427540	R12014	Hs.20976	ESTs	2.39	1.73	3.24
30	449523	NM_000579	Hs.54443	chemokine (C-C motif) receptor 5	2.39	1.96	2.39
	433848	AF095719	Hs.93764	carboxypeptidase A4	2.38	2.45	2.65
	438501	Z44110	Hs.86149	phosphoinositide 3-phosphate-binding prot	2.38	1.85	2.38
	430066	AI929659	Hs.237825	signal recognition particle 72kD	2.38	1.60	2.79
	447343	AA256641	Hs.236894	ESTs, Highly similar to S02392 alpha-2-m	2.37	1.99	6.23
35	450447	AF212223	Hs.25010	hypothetical protein P15-2	2.37	1.72	3.24
	458997	AW937420		ESTs	2.37	1.57	3.27
	451446	AI826288	Hs.171637	hypothetical protein MGC2628	2.35	1.90	2.39
	408838	AI669535	Hs.40369	ESTs	2.35	1.59	2.71
	448275	BE514434	Hs.20830	kinesin-like 2	2.35	2.19	2.35
40	424148	BE242274	Hs.1741	integrin, beta 7	2.35	1.89	3.07
	410700	AA352335	Hs.65641	hypothetical protein FLJ20073	2.35	1.65	2.35
	409105	AW467539	Hs.255877	ESTs	2.35	2.50	2.35
	452882	AW972990	Hs.196270	folate transporter/carrier	2.34	2.12	2.90
	425606	U52112	Hs.158331	renin-binding protein	2.34	2.69	1.69
45	433576	BE080715	Hs.161091	ESTs	2.34	3.74	2.34
	423494	AW504365	Hs.24143	Wiskott-Aldrich syndrome protein interac	2.34	2.08	4.48
	431620	AA126109	Hs.264981	2'-5'-oligoadenylate synthetase 2 (69-71	2.33	2.43	2.66
	436614	AW104388	Hs.149091	ESTs	2.33	3.37	2.33
	425289	AW139342	Hs.155530	interferon, gamma-inducible protein 16	2.33	1.67	4.28
50	426827	AW067805	Hs.172665	methylene-tetrahydrofolate dehydrogenase	2.33	1.58	0.40
	430015	AW768399		ESTs	2.33	1.76	2.33
	421282	AA286914	Hs.40782	ESTs	2.32	1.65	2.49
	447737	AK000643	Hs.19404	DKFZP564L0862 protein	2.32	2.16	1.48
	432540	AI821517	Hs.105866	ESTs	2.32	1.58	2.35
55	418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	2.32	2.46	9.99
	414829	AA321568	Hs.77436	pleckstrin	2.32	1.91	2.32
	425390	AI092634	Hs.156114	protein tyrosine phosphatase, non-recept	2.31	1.63	2.31
	448569	BE382657	Hs.21486	signal transducer and activator of trans	2.31	2.79	2.41
	428819	AL135823	Hs.193914	KIAA0575 gene product	2.30	1.60	2.95
60	409512	AW979187	Hs.293591	melanoma differentiation associated prot	2.30	1.95	3.66
	425231	AA527161		ESTs	2.28	1.96	2.36
	416091	AF295370	Hs.283082	defensin, beta 3	2.28	2.76	2.18
	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	2.27	2.88	2.46
	427719	AI393122	Hs.134726	ESTs	2.27	1.88	2.29
65	431830	Y16645	Hs.271387	small inducible cytokine subfamily A (Cy	2.27	2.16	4.09
	457465	AW301344	Hs.122908	DNA replication factor	2.26	2.23	2.26
	431639	AK000680	Hs.266175	phosphoprotein associated with GEMs	2.26	2.13	3.16
	442485	BE092285	Hs.29724	hypothetical protein FLJ13187	2.26	1.75	2.84
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	2.26	3.38	2.56
70	449317	AW293413	Hs.132906	19A24 protein	2.26	2.04	2.73
	429922	Z97630	Hs.226117	H1 histone family, member 0	2.26	1.59	2.38
	441362	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E. coli Re	2.25	1.86	3.07
	425388	AA329384	Hs.156110	immunoglobulin kappa constant	2.25	1.91	2.25
	417282	AA195203		RAB5C, member RAS oncogene family	2.25	2.23	3.20
75	406687	M31126		matrix metalloproteinase 11 (stromelysin	2.24	2.69	2.78
	437862	AW978107	Hs.5884	Homo sapiens mRNA; cDNA DKFZp586C0224 (f	2.23	2.20	2.51
	408015	AW136771	Hs.244349	epidermal differentiation complex protei	2.23	4.59	2.47
	442503	AF147078	Hs.150853	p53-responsive gene 5	2.23	3.62	0.85
	429747	M87507	Hs.2490	caspase 1, apoptosis-related cysteine pr	2.22	1.60	1.69
80	424825	AF207069	Hs.153357	procollagen-lysine, 2-oxoglutarate 5-dio	2.22	5.53	2.46
	417693	AW959741	Hs.40368	adaptor-related protein complex 1, sigma	2.21	2.40	4.37
	422947	AA306782	Hs.122552	G-2 and S-phase expressed 1	2.21	2.06	2.32
	445875	AF070524	Hs.13410	Homo sapiens clone 24453 mRNA sequence	2.20	2.69	2.91
	417366	BE185289	Hs.1076	small proline-rich protein 1B (cornifin)	2.20	2.26	3.79

5	450055	AL050107	Hs.24341	transcriptional co-activator with PDZ-bi	2.20	1.96	2.44
	423397	NM_001838	Hs.1652	chemokine (C-C motif) receptor 7	2.20	3.28	2.99
	427051	BE178110	Hs.173374	Homo sapiens cDNA FLJ10500 fis, clone NT	2.20	1.98	3.40
	418203	X54942	Hs.83758	CDC28 protein kinase 2	2.20	1.44	2.31
	409354	N68188	Hs.159472	Homo sapiens cDNA: FLJ22224 fis, clone H	2.18	2.44	2.70
	418941	AA452970	Hs.239527	E1B-55kDa-associated protein 5	2.18	1.75	2.70
	424723	BE409813	Hs.152337	protein arginine N-methyltransferase 3(h	2.18	1.55	2.44
	430132	AA204686	Hs.234149	hypothetical protein FLJ20647	2.18	1.43	2.37
10	452194	AJ694413		Ubiquitin-like protein FAT10777 - diubiq	2.17	3.07	1.76
	417933	X02308	Hs.82962	thymidylate synthetase	2.17	1.86	4.15
	420137	AA306478	Hs.95327	CD3D antigen, delta polypeptide (TIT3 co	2.17	2.38	2.91
	425317	AW205118	Hs.210546	interleukin 21 receptor	2.17	2.02	2.22
	447769	AW873704	Hs.320831	Homo sapiens cDNA FLJ14597 fis, clone NT	2.16	1.87	2.49
	407748	AL079409	Hs.38176	KIAA0606 protein; SCN Circadian Oscillat	2.16	1.55	2.26
15	452958	AA883929	Hs.40527	ESTs	2.15	1.56	2.84
	440325	NM_003812	Hs.7164	a disintegrin and metalloproteinase doma	2.15	1.76	2.97
	426153	AF057169	Hs.182771	vitelliform macular dystrophy (Best dise	2.15	1.85	2.74
	430580	AA806105	Hs.300697	immunoglobulin heavy constant gamma 3 (G	2.14	1.88	4.99
	451952	AL120173	Hs.301663	ESTs	2.13	2.08	2.13
20	450534	AJ570189	Hs.25132	KIAA0470 gene product	2.12	1.67	3.41
	449217	AA278536	Hs.23262	ribonuclease, RNase A family, k6	2.12	1.75	2.27
	432734	AA837396	Hs.263925	US1-interacting protein NUDE1, rat homo	2.12	2.14	2.49
	413190	AA151802	Hs.40368	adaptor-related protein complex 1, sigma	2.12	2.46	2.67
25	443991	NM_002250	Hs.10082	potassium intermediate/small conductance	2.12	2.16	2.82
	429624	AA458648	Hs.99476	ESTs, Weakly similar to 1313184B alpha1	2.11	2.01	0.68
	447178	AW594841	Hs.192417	ESTs	2.10	2.52	2.10
	423017	AW178761	Hs.227948	serine (or cysteine) proteinase inhibito	2.10	1.52	4.01
	452110	T47667	Hs.28005	Homo sapiens cDNA FLJ11309 fis, clone PL	2.10	1.53	2.10
30	436797	AA731491	Hs.334477	hypothetical protein MGCI4879	2.10	1.55	2.41
	453256	AJ565587	Hs.32556	KIAA0379 protein	2.09	2.13	2.89
	405547			NM_018833-Homo sapiens transporter 2, A	2.09	2.61	2.09
	434203	BE262677	Hs.283558	hypothetical protein PRO1855	2.09	1.76	4.10
	412609	Z48804	Hs.74124	ocular albinism 1 (Nettleship-Falls)	2.09	3.91	2.38
35	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	2.09	1.62	1.28
	417576	AA339449	Hs.82285	phosphoribosylglycinamide formyltransfer	2.08	1.86	2.08
	447377	X77343	Hs.334334	transcription factor AP-2 alpha	2.08	2.83	2.08
	423198	M81933	Hs.1634	cell division cycle 25A	2.08	1.66	2.23
	433068	NM_006456	Hs.288215	sialyltransferase	2.08	1.94	2.60
40	409038	T97490	Hs.50002	small inducible cytokine subfamily A (Cy	2.07	1.91	3.62
	452392	L20815	Hs.507	corneodesmosin	2.07	3.96	0.97
	403532			NM_024638-Homo sapiens hypothetical prot	2.07	1.88	2.68
	439859	AW292872	Hs.124554	ESTs	2.07	1.72	2.22
	428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino	2.07	2.26	4.22
45	442643	U82756		PRP4/STKWD splicing factor	2.07	1.74	1.90
	426312	AF026939	Hs.181874	Interferon-induced protein with tetratri	2.06	2.08	1.43
	409988	N27687	Hs.334334	transcription factor AP-2 alpha (activat	2.06	2.12	2.06
	408548	AA055449	Hs.63187	ESTs, Weakly similar to ALUC_HUMAN !!!!	2.06	1.65	2.91
	442271	AF000652	Hs.8180	syndecan binding protein (syntenin)	2.06	1.97	2.42
50	414142	AW368397	Hs.334485	hemiscitin (fibulin 6)	2.05	2.44	2.05
	420931	AF044197	Hs.100431	small inducible cytokine B subfamily (Cy	2.05	2.37	2.05
	450325	AJ935962	Hs.91973	ESTs	2.05	1.67	1.82
	424090	X99699	Hs.139262	XIAP associated factor-1	2.05	1.56	1.99
	438209	AL120859	Hs.6111	aryl-hydrocarbon receptor nuclear transl	2.04	1.52	2.07
55	413794	AF234532	Hs.61638	myosin X	2.04	2.02	2.11
	414945	BE076358	Hs.77667	lymphocyte antigen 6 complex, locus E	2.04	4.57	1.64
	425560	L11144	Hs.1907	galanin	2.04	1.57	2.26
	420052	AA418850	Hs.44410	ESTs	2.03	1.90	2.21
	415947	U04045	Hs.78934	mutS (E. coli) homolog 2 (colon cancer,	2.03	1.53	2.31
60	416406	D66961	Hs.79299	lipoma HMGIC fusion partner-like 2	2.02	1.73	2.02
	426759	AJ590401	Hs.21213	ESTs	2.02	1.86	5.47
	432435	BE218886	Hs.282070	ESTs	2.02	1.39	1.67
	444184	T87841	Hs.282990	Human DNA sequence from clone RP1-28H20	2.02	1.57	2.02
	421574	AJ000152	Hs.105924	defensin, beta 2	2.02	2.22	2.15
65	411358	R47479	Hs.94761	KIAA1691 protein	2.01	2.55	1.75
	408209	NM_004454	Hs.43697	ets variant gene 5 (ets-related molecule	2.01	2.58	2.39
	409262	AK000631	Hs.52256	hypothetical protein FLJ20624	2.01	1.50	2.01
	400750			Target Exon	2.01	1.73	2.09
	439496	BE616501	Hs.32343	Homo sapiens, Similar to RIKEN cDNA 1110	2.01	2.42	0.78
70	420460	AA262331	Hs.48376	Homo sapiens clone HB-2 mRNA sequence	2.01	1.65	1.72
	446839	BE091926	Hs.16244	mitotic spindle coiled-coil related prot	2.01	1.61	1.03
	427647	W19744	Hs.180059	Homo sapiens cDNA FLJ20653 fis, clone KA	2.00	2.11	2.33
	436200	R51386	Hs.124881	ESTs	2.00	1.89	2.24
	414175	AJ308876	Hs.103849	hypothetical protein DKFZp761D112	1.99	1.50	1.99
75	420005	AW271106	Hs.133294	ESTs	1.99	2.03	2.59
	417848	AA206581	Hs.116586	ESTs, Weakly similar to JCS314 CDC28cdc	1.99	1.42	2.17
	435545	AA687415	Hs.28107	ESTs	1.99	1.89	1.99
	443426	AF098158	Hs.93329	chromosome 20 open reading frame 1	1.99	2.23	3.44
	444342	NM_014398	Hs.10887	similar to lysosome-associated membrane	1.99	2.05	0.32
80	453905	NM_002314	Hs.35566	LIM domain kinase 1	1.98	2.48	2.79
	453884	AA355925	Hs.36232	KIAA0186 gene product	1.98	1.93	1.98
	459373	BE408266	Hs.301406	hypothetical protein PP3501	1.98	2.22	1.91
	422809	AK001379	Hs.121028	hypothetical protein FLJ10549	1.98	1.68	1.98
	452840	AJ097393	Hs.43481	hypothetical protein DKFZp564K192	1.98	1.67	2.18

5	409178	BE393948	Hs.50915	kalikrein 5	1.98	3.76	1.37
	420991	AW504814	Hs.287379	Homo sapiens mRNA for FLJ00111 protein,	1.98	1.90	2.63
	414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	1.97	1.88	1.23
	443105	X96753	Hs.9004	chondroitin sulfate proteoglycan 4 (mela	1.97	1.95	5.55
	413450	Z99716	Hs.75372	N-acetylgalactosaminidase, alpha-	1.97	1.77	1.97
	431574	AW572659	Hs.261373	hypothetical protein dJ434O14.3	1.97	1.73	3.89
	408561	AJ308037	Hs.84120	hypothetical protein MGC13016	1.97	2.89	2.08
	421866	M24470	Hs.1435	guanosine monophosphate reductase	1.97	1.95	2.65
	405506			Target Exon	1.96	1.72	2.27
10	412490	AW803564	Hs.288850	Homo sapiens cDNA: FLJ22528 fis, clone H	1.96	1.74	2.35
	437379	AL359575	Hs.23765	Homo sapiens mRNA; cDNA DKFZp547M123 (fr	1.95	2.09	2.77
	448356	AL120837	Hs.20993	high-glucose-regulated protein 8	1.95	1.66	2.58
	453931	AL121278	Hs.25144	ESTs	1.95	2.38	1.95
	424308	AW975531	Hs.154443	minichromosome maintenance deficient (S.	1.95	1.63	2.82
15	429547	AW009166	Hs.99376	FGENESH predicted novel secreted protein	1.94	2.02	1.35
	442064	AI422667	Hs.88594	ESTs	1.94	1.49	2.21
	400533			ENSP00000209376*-PRED65 protein (Fragmen	1.94	1.69	1.94
	448752	AA593867	Hs.300842	KJAA1608 protein	1.94	1.71	2.40
20	408636	BE294925	Hs.46680	CGI-12 protein	1.94	1.69	2.93
	439569	AW602166	Hs.222399	CEP1 protein	1.93	1.62	3.21
	405779			NM_005367:Homo sapiens melanoma antigen,	1.93	1.83	1.99
	444670	H58373	Hs.332938	hypothetical protein MGC5370	1.93	1.97	1.93
	446950	AA305800	Hs.5672	hypothetical protein AF140225	1.93	1.56	1.61
25	409185	AW961601	Hs.252406	hypothetical protein FLJ12296 similar to	1.93	2.12	2.63
	409098	AA132672	Hs.7984	pleckstrin homology, Sec7 and coiled/coi	1.92	2.12	2.51
	413916	N49813	Hs.75615	apolipoprotein C-II	1.92	1.98	0.22
	429609	AF002246	Hs.210863	cell adhesion molecule with homology to	1.92	1.65	6.39
	402994			NM_002463*:Homo sapiens myxovirus (influ	1.92	2.45	1.89
30	425722	AI659076	Hs.97031	hypothetical protein MGC13047	1.92	2.69	2.30
	421958	AA357185	Hs.109918	ras homolog gene family, member H	1.92	2.10	2.93
	412584	X54870	Hs.74085	DNA segment on chromosome 12 (unique) 24	1.91	1.57	1.91
	415402	AA164687	Hs.177576	mannosyl (alpha-1,3-)-glycoprotein beta-	1.91	1.44	1.68
	430280	AA361258	Hs.237868	interleukin 7 receptor	1.90	1.52	1.14
	426251	M24283	Hs.168383	intercellular adhesion molecule 1 (CD54)	1.90	2.16	1.21
35	440773	AA352702	Hs.37747	Homo sapiens, Similar to RIKEN cDNA 2700	1.90	1.84	2.07
	427923	AW274357	Hs.301406	hypothetical protein PP3501	1.90	4.26	1.70
	426470	AA528794	Hs.128644	ESTs	1.90	2.69	2.04
	409557	BE182896	Hs.3686	ESTs	1.90	2.01	1.90
40	429714	BE561801	Hs.2484	T-cell leukemia/lymphoma 1A	1.90	2.49	2.52
	428125	AA393071	Hs.182579	leucine aminopeptidase	1.89	1.89	1.49
	427634	AI399745	Hs.18449	hypothetical protein MGC10820	1.89	3.59	1.71
	452874	AK001061	Hs.30925	hypothetical protein FLJ10199	1.89	1.67	1.45
	418883	BE387036	Hs.1211	acid phosphatase 5, tartrate resistant	1.89	2.55	1.39
45	448243	AW369771		integrin, beta 8	1.89	1.96	1.89
	416114	AI695549	Hs.183868	glucuronidase, beta	1.89	1.70	1.10
	425935	Z98200	Hs.163724	HSPC019 protein	1.88	1.86	2.04
	440672	AF083811	Hs.7345	MAD1 (mitotic arrest deficient, yeast, h	1.88	4.16	1.78
	430171	AF086289	Hs.234766	skin-specific protein	1.87	2.70	0.75
50	407366	AF026942	Hs.17518	gb.Homo sapiens cig33 mRNA, partial sequ	1.87	2.25	1.87
	454294	AB000734	Hs.50640	JAK binding protein	1.87	1.98	1.46
	417370	T26651	Hs.82030	tryptophanyl-tRNA synthetase	1.87	2.73	1.71
	409417	AA156247	Hs.104879	serine (or cysteine) proteinase inhibito	1.87	1.79	2.72
	401781			Target Exon	1.87	1.88	1.16
55	440590	AI863446	Hs.266308	mosaic serine protease	1.86	1.79	1.13
	428450	NM_014791	Hs.184339	KJAA0175 gene product	1.86	1.72	4.39
	433675	AW977653	Hs.75319	ribonucleotide reductase M2 polypeptide	1.86	1.81	1.86
	429323	NM_001649	Hs.2391	apical protein, Xenopus laevis-like	1.86	1.57	1.86
	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	1.85	1.71	5.82
60	453107	NM_016113	Hs.279746	vanilloid receptor-like protein 1	1.85	2.75	1.84
	430441	BE398091		desmoplakin (DPI, DPII)	1.85	1.80	2.79
	417512	X76534	Hs.82226	glycoprotein (transmembrane) nmb	1.85	1.80	1.86
	423673	BE003054	Hs.1695	matrix metalloproteinase 12 (macrophage	1.85	1.94	1.85
	431958	X63629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	1.85	1.72	2.52
65	414737	AI160385	Hs.125087	ESTs	1.84	1.90	1.84
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	1.84	1.57	1.84
	428311	NM_005651	Hs.183671	tryptophan 2,3-dioxygenase	1.84	1.41	0.12
	412141	AI183838	Hs.48938	hypothetical protein FLJ21802	1.84	1.70	3.15
	428515	AF030339	Hs.286229	plexin C1	1.84	1.66	1.84
70	427914	AA417350	Hs.20575	ESTs	1.84	2.32	2.17
	439352	BE614347	Hs.169615	hypothetical protein FLJ20989	1.84	1.55	1.84
	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	1.83	3.20	1.75
	435080	AI831760	Hs.155111	hypothetical protein FLJ14428	1.83	1.62	1.47
	407966	AA295052	Hs.38516	Homo sapiens, clone MGC:15887, mRNA, com	1.83	1.58	2.11
75	421535	AB002359	Hs.105478	phosphoribosylformylglycinamide syntha	1.83	1.73	2.18
	433029	NM_014322	Hs.279926	opsin 3 (encephalopsin)	1.83	1.96	1.83
	426158	NM_001582	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	1.83	1.61	2.46
	426890	AA393167	Hs.41294	ESTs	1.82	2.44	1.82
	411027	AF072099	Hs.67846	leukocyte immunoglobulin-like receptor,	1.82	2.24	2.01
	441859	AW194364	Hs.94814	ESTs, Weakly similar to FIG1 MOUSE FIG-1	1.82	2.72	2.16
80	437435	AA249439	Hs.27027	hypothetical protein DKFZp762H1311	1.82	1.50	1.82
	448357	N20169	Hs.108923	RAB38, member RAS oncogene family	1.82	2.52	1.76
	420674	NM_000055	Hs.1327	butyrylcholinesterase	1.82	1.43	0.68
	439219	N33883	Hs.41322	ESTs	1.82	1.88	2.43

	432810	AA863400		ESTs	1.82	1.43	1.82
	417404	NM_007350	Hs.82101	pleckstrin homology-like domain, family	1.82	1.98	1.82
	447484	AA464839	Hs.292566	hypothetical protein FLJ14697	1.82	1.63	1.82
5	436456	AW292677	Hs.248122	G protein-coupled receptor 24	1.82	2.80	2.18
	418918	X07871	Hs.89476	CD2 antigen (p50), sheep red blood cell	1.82	2.28	2.00
	424755	AB033094	Hs.152925	KIAA1268 protein	1.82	1.85	1.62
	436315	BE390513	Hs.27935	hypothetical protein MGC4837	1.82	1.74	5.18
	420783	AI659838	Hs.99923	lectin, galactoside-binding, soluble, 7	1.81	1.87	0.80
10	417105	X60992	Hs.81226	CD6 antigen	1.81	1.88	2.03
	423961	D13666	Hs.136348	periostin (OSF-2os)	1.81	1.73	2.45
	446019	AI362520		histone deacetylase 3	1.81	1.39	2.24
	412580	AA113262	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	1.81	3.05	1.58
	409415	AA579258	Hs.6083	Homo sapiens cDNA: FLJ21028 fs, clone C	1.80	2.00	1.78
	453684	AK001922	Hs.34578	alpha2,3-sialyltransferase	1.80	1.98	1.22
15	446821	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	1.80	1.56	1.71
	453779	N35187	Hs.43388	28kD interferon responsive protein	1.80	2.42	2.04
	434706	AI656291	Hs.116394	ESTs	1.80	1.58	1.80
	416065	BE267931	Hs.78996	proliferating cell nuclear antigen	1.80	1.79	2.51
20	453331	AI240665		ESTs	1.79	1.43	2.33
	429412	NM_006235	Hs.2407	POU domain, class 2, associating factor	1.79	1.46	4.46
	428784	Y12851	Hs.193470	purinergic receptor P2X, ligand-gated io	1.79	2.30	1.79
	453507	AF083217	Hs.33085	WD repeat domain 3	1.79	1.49	1.51
	452826	BE245286	Hs.301636	peroxisomal biogenesis factor 6	1.79	1.57	2.00
25	439237	AW408158	Hs.318893	ESTs, Weakly similar to A47582 B-cell gr	1.79	2.26	2.22
	406672	M26041	Hs.198253	major histocompatibility complex, class	1.79	1.76	1.78
	431009	BE149762	Hs.48956	gap junction protein, beta 6 (connexin 3	1.79	1.43	3.32
	452698	NM_001295	Hs.301921	chemokine (C-C motif) receptor 1	1.78	1.66	1.29
	424954	NM_000546	Hs.1846	tumor protein p53 (Li-Fraumeni syndrome)	1.78	1.73	2.35
30	436378	AJ227874	Hs.99244	ESTs	1.78	1.84	1.78
	421778	AA428000	Hs.283072	actin related protein 2/3 complex, subun	1.78	1.66	3.67
	421948	L42583	Hs.334309	keratin 6A	1.78	1.74	3.00
	414915	NM_002462	Hs.76391	myxovirus (influenza) resistance 1, homo	1.77	2.27	2.13
	437317	AA748613	Hs.311977	ESTs, Highly similar to SWUSNF related,	1.77	1.98	2.32
35	427318	AF186081	Hs.175783	zinc transporter	1.77	1.61	0.92
	418403	D86978	Hs.84790	KIAA0225 protein	1.76	1.49	2.24
	421433	AI829192	Hs.22380	ESTs	1.76	1.49	2.52
	450728	AW162923	Hs.25363	presenilin 2 (Alzheimer disease 4)	1.76	1.74	1.76
	428655	H05769	Hs.188757	Homo sapiens, clone MGC:5564, mRNA, comp	1.76	1.43	1.76
40	427536	BE277141	Hs.115803	gb:601178666F1 NIH_MGC_20 Homo sapiens c	1.76	2.12	1.76
	433364	AI075407	Hs.296083	ESTs, Moderately similar to IS4374 gene	1.76	1.86	1.48
	401994			Target Exon	1.75	1.44	1.75
	418299	AA279630	Hs.83968	integrin, beta 2 (antigen CD18 (p95), ty	1.75	1.69	1.79
	408633	AW963372	Hs.46677	PRO2000 protein	1.75	1.46	1.88
45	429978	AA249027		ribosomal protein S6	1.75	1.60	1.92
	450690	AA296696	Hs.333418	FXRD domain-containing ion transport reg	1.75	2.13	2.03
	456967	AW004056	Hs.168357	T-box 2	1.74	1.95	1.42
	417866	AW067903	Hs.82772	collagen, type XI, alpha 1	1.74	2.64	2.01
	428746	AW503820	Hs.192651	Sp1-B transcription factor (Spi-1/PU.1 r	1.74	2.82	2.31
50	432642	BE297635	Hs.3069	heat shock 70kD protein 9B (mortalin-2)	1.74	1.51	1.62
	429505	AW820035	Hs.278679	a disintegrin and metalloproteinase doma	1.73	1.54	3.15
	412851	AI826502	Hs.97269	ESTs	1.73	1.67	1.05
	453953	AW408337	Hs.36972	CD7 antigen (p41)	1.73	2.22	2.28
	430413	AW842182	Hs.241392	small inducible cytokine A5 (RANTES)	1.73	2.05	1.47
55	419485	AA489023	Hs.99807	ESTs, Weakly similar to unnamed protein	1.73	1.71	1.73
	447217	BE465754	Hs.17778	neuropilin 2	1.73	1.62	4.70
	437673	AW665665	Hs.153034	ESTs	1.72	1.55	2.10
	437879	BE262082	Hs.5894	hypothetical protein FLJ10305	1.72	2.50	1.80
	448410	AK000227	Hs.21126	hypothetical protein FLJ20220	1.72	1.48	3.98
60	413313	NM_002047	Hs.283108	glycyl-tRNA synthetase	1.72	2.19	1.62
	452203	X57522		transporter 1, ATP-binding cassette, sub	1.72	2.68	1.68
	443950	NM_001425	Hs.9999	epithelial membrane protein 3	1.71	2.17	2.24
	403969			ENSP00000034663:Zinc finger protein 131	1.71	1.31	1.71
	450832	AW970602	Hs.105421	ESTs	1.71	1.33	2.38
65	453005	AW055308	Hs.31803	ESTs, Weakly similar to N-WASP (H.sapien	1.71	1.67	1.95
	439783	AI125760	Hs.24835	hypothetical protein FLJ14594	1.71	2.10	2.20
	418678	NM_001327	Hs.167379	cancer/testis antigen (NY-ESO-1)	1.71	3.86	1.76
	432259	BE269103	Hs.274201	60S acidic ribosomal protein PO	1.71	1.85	1.94
	420340	NM_000734	Hs.97087	CD32 antigen, zeta polypeptide (IT3 com	1.71	2.12	1.98
	428289	M26301	Hs.2253	complement component 2	1.71	2.46	0.76
70	424006	AF054815	Hs.137548	CD84 antigen (leukocyte antigen)	1.70	1.70	2.78
	440039	Z46188	Hs.6874	KIAA0472 protein	1.70	2.24	1.60
	406646	M33600	Hs.308026	major histocompatibility complex, class	1.70	2.27	1.33
	425367	BE271188	Hs.155975	protein tyrosine phosphatase, receptor t	1.70	2.77	2.07
75	420286	AI796395	Hs.111377	ESTs	1.70	1.50	3.21
	430255	AK000703	Hs.323822	Homo sapiens mRNA for KIAA1551 protein,	1.69	1.44	1.69
	445247	AW274290	Hs.153997	ESTs	1.69	2.57	1.65
	436965	Z11894	Hs.156110	gb:HLsapiens rearranged mRNA for immunog	1.69	1.52	3.13
	410257	BE244044	Hs.61469	hypothetical protein	1.69	1.99	1.97
80	424663	NM_002351	Hs.151544	SH2 domain protein 1A, Duncan's disease	1.69	1.76	1.69
	427792	M63928	Hs.180841	tumor necrosis factor receptor superfamily	1.69	1.98	2.48
	458098	BE550224		metallothionein 1E (functional)	1.68	1.83	1.68
	425397	J04089	Hs.156346	topoisomerase (DNA) II alpha (170kD)	1.68	1.57	4.09
	421485	AA243499	Hs.104800	hypothetical protein FLJ10134	1.68	1.64	0.68

5	421563	NM_006433	Hs.105806	granulysin	1.68	2.24	1.55
	448775	AB025237	Hs.388	nucleoside diphosphate linked moi	1.68	1.98	2.05
	451418	BE387790	Hs.26369	hypothetical protein FLJ20287	1.68	1.35	1.68
	440457	BE387593	Hs.21321	Homo sapiens clone FLB9213 PRO2474 mRNA,	1.68	1.88	1.63
	438866	U44385	Hs.325495	tissue inhibitor of metalloproteinase 2	1.67	2.54	1.90
10	401760			Target Exon	1.67	1.93	1.61
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	1.67	1.85	4.25
	446644	NM_003272	Hs.15791	transmembrane 7 superfamily member 1 (up	1.67	1.94	1.48
	415701	NM_003878	Hs.78619	gamma-glutamyl hydrolase (conjugase, fol	1.67	1.65	0.90
	450293	N36754	Hs.171118	hypothetical protein FLJ00026	1.67	1.54	1.95
15	412856	BE386745	Hs.74531	basigin (OK blood group)	1.67	2.71	1.47
	439318	AW837046	Hs.6527	G protein-coupled receptor 56	1.66	1.82	1.19
	424399	AJ905687		AJ905687:IL-8T095-190199-019 8T095 Homo	1.66	3.65	0.44
	432355	AA534416	Hs.162185	ESTs, Weakly similar to S42799 gap prec	1.66	1.98	1.45
	427239	BE270447		ubiquitin carrier protein	1.66	2.94	1.92
20	425262	O87119	Hs.155418	GS3955 protein	1.66	2.36	1.66
	413869	NM_000878	Hs.75596	interleukin 2 receptor, beta	1.66	1.86	1.90
	406698	X03068	Hs.73931	major histocompatibility complex, class	1.65	2.05	1.31
	446217	AG51594	Hs.99709	ESTs	1.65	1.98	1.77
	400222			NM_002082: Homo sapiens G protein-couple	1.65	1.74	1.81
25	432468	AW402155	Hs.3003	CD3E antigen, epsilon polypeptide (T173	1.65	2.50	1.77
	417237	H86385	Hs.81737	palmitoyl-protein thioesterase 2	1.65	2.89	1.57
	433012	NM_004045	Hs.279910	ATX1 (antioxidant protein 1, yeast) homo	1.64	2.76	1.26
	446291	BE397753	Hs.14623	interferon, gamma-inducible protein 30	1.64	1.96	1.24
	433867	AK000596	Hs.3618	hippocampin-like 1	1.64	1.47	1.00
30	433671	AW138797	Hs.132906	19A24 protein	1.64	2.17	1.96
	418371	M13560	Hs.84298	CD74 antigen (invariant polypeptide of m	1.64	2.18	1.43
	432336	NM_002759	Hs.274382	protein kinase, interferon-inducible dou	1.64	1.47	1.64
	409264	NM_014937	Hs.52463	KIAA0966 protein	1.64	1.46	4.89
	431836	AF178532	Hs.271411	beta-site APP-cleaving enzyme 2	1.64	2.58	1.79
35	414586	AA306160	Hs.16488	lymphocyte cytosolic protein 1 (L-plasti	1.63	1.72	1.88
	418117	AJ922013	Hs.83496	linker for activation of T cells	1.63	1.98	1.99
	448304	BE622768	Hs.290356	mesoderm development candidate 1	1.63	1.67	1.86
	425535	AB007937	Hs.158287	KIAA0468 gene product	1.63	2.56	1.97
	453258	AW293134	Hs.32597	ring finger protein (C3H2C3 type) 6	1.63	1.46	2.43
40	420000	AB036063	Hs.94262	p53-inducible ribonucleotide reductase s	1.63	1.34	1.94
	447321	AW271217	Hs.281434	Homo sapiens cDNA FLJ14028 fis, clone HE	1.63	1.96	1.77
	422192	AA305159	Hs.113019	ts485	1.62	1.45	1.62
	450701	H39960	Hs.288467	hypothetical protein XP_098151 (leucine-	1.62	2.23	1.53
	419381	AB023420	Hs.90093	heat shock 70kD protein 4	1.62	1.57	2.38
45	424779	AL046851	Hs.153053	CD37 antigen	1.62	1.92	2.10
	413283	R78669	Hs.23756	hypothetical protein similar to swine ac	1.62	1.41	1.12
	414907	X90725	Hs.77597	polo (Drosophila)-like kinase	1.62	2.03	2.13
	414159	AW511414	Hs.257352	apoptinoprotein L 6	1.62	1.89	1.32
	410055	AJ250839	Hs.58241	gene for serine/threonine protein kinase	1.62	1.81	1.27
50	428179	A1127772	Hs.279696	serum glucocorticoid regulated kinase-li	1.62	1.50	2.13
	436251	BE515065	Hs.296585	nucleolar protein (NCKED repeat)	1.61	1.71	2.02
	451708	AL306536	Hs.60975	ESTs	1.61	2.31	1.70
	418113	AJ272141	Hs.83484	SRY (sex determining region Y)-box 4	1.61	1.53	2.50
	410600	AW575742		ESTs, Moderately similar to S65657 alpha	1.61	1.83	1.69
55	436873	N23874	Hs.50477	RAB27A, member RAS oncogene family	1.61	1.56	1.61
	440201	AL359588	Hs.7041	hypothetical protein DKFZp762B226	1.61	1.58	1.85
	414368	W70171	Hs.75939	uridine monophosphate kinase	1.61	1.59	2.75
	454429	BE273437	Hs.301406	hypothetical protein PP3501	1.61	3.54	1.52
	422257	NM_001716	Hs.113916	Burkitt lymphoma receptor 1, GTP-binding	1.61	2.15	1.54
60	426437	BE076537	Hs.169895	ubiquitin-conjugating enzyme E2L 6	1.60	2.01	1.36
	408826	AF216077	Hs.48376	Homo sapiens clone HB-2 mRNA sequence	1.60	2.00	1.60
	414761	AU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	1.60	1.38	2.23
	429612	AF062649	Hs.252587	pituitary tumor-transforming 1	1.60	1.78	2.59
	411263	BE297802	Hs.69360	kinesin-like 6 (mitotic centromere-assoc	1.60	1.78	2.07
65	417324	AW265494		ESTs	1.60	2.48	1.91
	430325	AF004562	Hs.239356	syntaxin binding protein 1	1.60	1.74	2.53
	431797	BE169641	Hs.270134	hypothetical protein FLJ20280	1.60	1.46	2.46
	434449	AW953484	Hs.3849	hypothetical protein FLJ22041 similar to	1.60	1.81	3.00
	443378	AW392550	Hs.9280	proteasome (prosome, macropain) subunit,	1.59	1.88	1.68
70	417437	U52682	Hs.82132	interferon regulatory factor 4	1.59	1.90	2.26
	437949	U78519	Hs.41654	ESTs, Weakly similar to A46010 X-linked	1.59	2.14	1.59
	401797			Target Exon	1.59	1.82	1.78
	449720	AA311152	Hs.288708	hypothetical protein FLJ21562	1.59	1.45	4.69
	424971	AA479005	Hs.154036	tumor suppressing subtransferable candid	1.59	1.82	1.68
75	415474	NM_014252	Hs.78457	solute carrier family 25 (mitochondrial	1.58	1.51	0.30
	430017	AA263172	Hs.35	protein tyrosine phosphatase, non-recept	1.58	1.72	2.46
	422515	AW500470	Hs.117950	multifunctional polypeptide similar to S	1.58	1.85	1.94
	434094	AA305599	Hs.238205	hypothetical protein PRO2013	1.58	1.25	2.09
	428844	AW972635	Hs.301904	hypothetical protein FLJ12671	1.58	1.72	1.80
80	440942	AW246547	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	1.58	2.60	1.58
	419596	BE379320	Hs.91448	MKP-1 like protein tyrosine phosphatase	1.58	1.84	1.22
	401151			Target Exon	1.58	2.43	1.60
	441590	AJ623207	Hs.190537	ESTs	1.58	1.40	1.58
	418677	S63308	Hs.87224	SRY (sex determining region Y)-box 5	1.58	1.68	1.58
	416448	L13210	Hs.79339	lectin, galactoside-binding, soluble, 3	1.58	2.28	1.60
	418739	AA310964	Hs.88012	SHP2 interacting transmembrane adaptor	1.58	2.14	2.10
	418216	AA662240	Hs.283099	AF15q14 protein	1.57	1.46	1.57

5	427700	AA262294	Hs.180383	dual specificity phosphatase 6	1.57	1.42	0.88
	436485	X59135	Hs.156110	immunoglobulin kappa constant	1.57	1.49	2.69
	404872			ENSP00000243173:DJ1105J22.1 (novel home	1.57	1.46	1.36
	408212	AA297567	Hs.43728	hypothetical protein	1.57	1.55	2.73
	414699	A1815523	Hs.76930	synuclein, alpha (non A4 component of am	1.57	1.36	1.57
	444006	BE395085	Hs.10085	type I transmembrane protein Fn14	1.57	1.70	1.13
	432946	U60899	Hs.279854	mannosidase, alpha, class 2B, member 1	1.57	1.75	1.57
	417929	R27219	Hs.74647	Human T-cell receptor active alpha-chain	1.57	2.26	2.10
10	41629	AL077025	Hs.265827	interferon, alpha-inducible protein (clo	1.57	2.09	1.57
	402876			NM_022161: Homo sapiens livin inhibitor-	1.56	2.28	1.45
	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	1.56	2.97	1.54
	414839	X63692	Hs.77462	DNA (cytosine-5)-methyltransferase 1	1.56	1.75	1.88
	430663	H43540	Hs.25292	ribonuclease H1, large subunit	1.56	2.76	1.67
15	425818	AB021225	Hs.159581	matrix metalloproteinase 17 (membrane-in	1.56	2.36	1.83
	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	1.56	1.78	2.06
	456508	AA502764	Hs.123469	ESTs, Weakly similar to AF208855 1 BM-01	1.56	1.32	2.70
	453613	F06838		ESTs	1.56	1.76	1.84
	428379	X06026	Hs.2259	CD3G antigen, gamma polypeptide (T173 co	1.56	1.43	1.56
20	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytactin)	1.56	1.47	3.15
	444652	BE513613	Hs.11538	actin related protein 2/3 complex, subun	1.56	2.01	1.56
	420842	A1083668	Hs.50601	hypothetical protein MGC10966	1.55	2.24	1.90
	447513	AW955776	Hs.313500	ESTs, Moderately similar to ALU7_HUMAN A	1.55	1.24	3.07
	408901	AK001330	Hs.48855	hypothetical protein FLJ10468	1.55	1.79	2.17
25	437669	A1358105	Hs.123164	ESTs, Weakly similar to match to ESTs AA	1.55	1.83	1.96
	439437	A1207788	Hs.343628	sialyltransferase 4B (beta-galactosidase	1.55	1.63	2.20
	418835	AL023694	Hs.88977	hypothetical protein dJ511E16.2	1.55	1.73	1.50
	448533	AA311426	Hs.21635	tubulin, gamma 1	1.54	2.02	1.67
	447763	BE619911	Hs.115803	hypothetical protein	1.54	2.52	1.52
30	430223	NM_002514	Hs.235935	nephroblastoma overexpressed gene	1.54	1.54	3.03
	448258	BE386983	Hs.343214	hypothetical protein FLJ20396	1.54	1.97	1.53
	440165	AW014718	Hs.7753	calumenin	1.54	1.53	2.55
	433376	A1249361	Hs.74122	caspase 4, apoptosis-related cysteine pr	1.54	1.34	1.69
	445982	BE410233	Hs.13501	pescadillo (zebrafish) homolog 1, contai	1.54	2.21	1.54
35	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	1.54	2.50	1.94
	416926	H03109	Hs.263395	HT018 protein	1.54	1.41	2.01
	431630	NM_002204	Hs.265829	integrin, alpha 3 (antigen CD49C, alpha	1.54	1.89	1.23
	442159	AW163390	Hs.278554	heterochromatin-like protein 1	1.54	1.93	1.79
	420421	AF281133	Hs.343589	exosome component Rrp41	1.53	2.47	1.61
40	406973	M34996	Hs.198253	major histocompatibility complex, class	1.53	1.62	1.19
	422530	AW972300	Hs.118110	bone marrow stromal cell antigen 2	1.53	1.74	1.37
	423420	A1571364	Hs.128382	Homo sapiens mRNA; cDNA DKFZp7611224 (f	1.53	2.49	1.59
	429359	W00482	Hs.2399	matrix metalloproteinase 14 (membrane-in	1.53	2.72	1.54
	429837	NM_003896	Hs.225939	sialyltransferase 9 (CMP-NeuAc:lactosylc	1.53	1.64	2.40
45	412939	AW411491	Hs.75069	eukaryotic translation elongation factor	1.52	1.98	0.98
	410678	BE540516	Hs.293732	hypothetical protein MGC3195	1.52	1.39	2.17
	431186	NM_012249	Hs.250697	ras-like protein	1.52	1.91	1.82
	406868	AA505445	Hs.300697	immunoglobulin heavy constant gamma 3 (G	1.52	1.57	1.82
	422532	AL008726	Hs.118126	protective protein for beta-galactosidas	1.51	2.08	1.19
50	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	1.51	1.50	0.67
	417308	H60720	Hs.81892	KIAA0101 gene product	1.51	1.42	7.41
	424902	NM_003866	Hs.153687	inositol polyphosphate 4-phosphatase, ty	1.51	2.75	1.51
	405204			NM_002086: Homo sapiens growth factor re	1.51	1.44	1.53
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	1.51	1.92	2.32
55	422516	BE258862	Hs.117950	multifunctional polypeptide similar to S	1.50	1.61	1.47
	418827	BE327311	Hs.47166	HT021	1.50	1.35	3.53
	427550	BE242818	Hs.311609	nuclear RNA helicase, DECD variant of DE	1.50	1.55	2.09
	432992	BE270472	Hs.279900	HSPC015 protein	1.50	1.82	0.82
	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	1.50	1.34	4.87
60	413566	AW604451	Hs.285814	sprouty (Drosophila) homolog 4	1.50	3.05	1.51
	422616	BE300330	Hs.118725	selenophosphate synthetase 2	1.50	1.36	0.46
	431222	X56777	Hs.273790	zona pellucida glycoprotein 3A (sperm re	1.50	2.05	1.78
	421861	S78798	Hs.108966	phosphatidylinositol-4-phosphate 5-kinas	1.49	1.52	2.62
	422684	BE561617	Hs.119192	H2A histone family, member Z	1.49	1.53	2.02
65	452363	A1582743	Hs.94953	Homo sapiens, Similar to complement comp	1.49	2.02	1.41
	411825	AK000334		hypothetical protein FLJ20327	1.49	2.55	1.38
	409425	U40462	Hs.54452	zinc finger protein, subfamily 1A, 1 (n	1.49	1.77	1.49
	431070	AW408164	Hs.249184	transcription factor 19 (SC1)	1.49	1.79	1.75
	427080	AW068287	Hs.301175	ras-related C3 botulinum toxin substrate	1.49	1.57	2.14
70	440676	NM_004987	Hs.112378	LIM and senescent cell antigen-like doma	1.49	1.42	1.46
	411296	BE207307	Hs.10114	growth suppressor 1	1.49	1.74	1.50
	442894	W02112	Hs.8836	parvin, beta	1.49	2.25	1.51
	416361	AW204907	Hs.6872	ESTs, Weakly similar to CA13_HUMAN COLLA	1.49	2.06	1.89
	424162	AA336229	Hs.93135	ESTs, Weakly similar to ALU2_HUMAN ALU S	1.49	1.59	1.65
75	447131	NM_004585	Hs.17466	retinoic acid receptor responder (lazar	1.49	2.00	1.22
	427759	BE245578	Hs.2200	perforin 1 (pore forming protein)	1.49	2.12	1.41
	422846	BE513934	Hs.1583	neutrophil cytosolic factor 1 (47kD, chr	1.49	1.61	1.67
	417007	AF224741	Hs.80768	chloride channel 7	1.48	1.94	1.71
	421924	BE514514	Hs.109606	coronin, actin-binding protein, 1A	1.48	1.68	1.67
80	422241	Y00062	Hs.170121	protein tyrosine phosphatase, receptor t	1.48	1.43	2.25
	410741	Z11695	Hs.324473	mitogen-activated protein kinase 1	1.48	1.37	3.17
	447471	AF039843	Hs.18676	sprouty (Drosophila) homolog 2	1.48	1.35	1.46
	427247	AW504221	Hs.174103	integrin, alpha L (antigen CD11A (p180),	1.47	1.58	1.48
	442945	A1024849	Hs.131853	ESTs	1.47	1.73	1.38

5	447200	BE543146	Hs.281434	Homo sapiens cDNA FLJ14028 fis, clone HE	1.47	1.89	1.60
	424085	NM_002914	Hs.139226	replication factor C (activator 1) 2 (40	1.47	2.03	1.47
	422867	L32137	Hs.1584	cartilage oligomeric matrix protein (pse	1.47	1.86	1.93
	416350	AF188625	Hs.189507	phospholipase A2, group IID	1.47	2.92	1.49
	458207	T28472	Hs.7655	U2 small nuclear ribonucleoprotein auxi	1.47	1.61	1.73
	447940	D86982	Hs.20060	KIAA0229 protein	1.47	1.93	1.72
	446106	AA377165	Hs.44833	ESTs	1.47	1.56	1.63
	425811	AL039104	Hs.159557	karyopherin alpha 2 (RAG cohort 1, impor	1.47	1.78	1.84
10	432615	AA557191	Hs.55028	ESTs, Weakly similar to IS4374 gene NF2	1.47	2.04	1.47
	435099	AC004770	Hs.4756	flap structure-specific endonuclease 1	1.47	1.76	1.83
	402294			Target Exon	1.47	1.27	1.46
	430147	R67074	Hs.234434	hairy/enhancer-of-split related with YRP	1.46	2.00	1.59
	414324	Y14768	Hs.890	lymphotoxin beta (TNF superfamily, membe	1.46	1.58	2.15
15	400270			NM_000026: Homo sapiens adenylosuccinat	1.46	1.42	2.32
	414806	D14694	Hs.77329	phosphatidylserine synthase 1	1.46	2.07	1.40
	419625	U91616	Hs.182885	nuclear factor of kappa light polypeptid	1.45	1.78	1.53
	430594	AK000790	Hs.246885	hypothetical protein FLJ20783	1.45	1.31	0.90
	419556	U29615	Hs.91093	chitinase 1 (chitobiosidase)	1.45	2.13	1.46
20	453350	AI917771	Hs.61790	hypothetical protein FLJ23338	1.45	2.00	1.39
	448412	AF219083	Hs.42532	ESTs, Moderately similar to ALU8_HUMAN A	1.45	1.37	3.17
	411619	AA18609	Hs.71040	hypothetical protein FLJ20425	1.45	1.39	3.01
	424218	AF031824	Hs.143212	cystatin F (leukocystatin)	1.45	1.82	1.44
	450395	BE048545	Hs.161757	ESTs	1.45	2.40	1.33
25	438555	AJ222089	Hs.143878	Homo sapiens mRNA for FLJ00024 protein,	1.45	1.91	1.65
	422497	D29642	Hs.1528	KIAA0053 gene product	1.45	1.94	1.49
	400991			Target Exon	1.45	2.10	1.42
	431779	AW971178	Hs.268571	apolipoprotein C-I	1.45	1.53	0.42
	424618	L29472	Hs.1802	major histocompatibility complex, class	1.44	1.96	1.86
30	423032	AI684746	Hs.119274	RAS p21 protein activator (GTPase activa	1.44	1.34	3.36
	424232	AB015982	Hs.143460	protein kinase C, nu	1.44	1.28	2.94
	438291	BE514605	Hs.289092	Homo sapiens cDNA: FLJ22380 fis, clone H	1.44	1.63	1.45
	445745	AB007924	Hs.13245	KIAA0455 gene product	1.44	1.17	1.52
	449209	BE616830	Hs.294145	ESTs	1.44	1.35	2.48
35	401029	BE244074	Hs.58831	regulator of Fas-induced apoptosis	1.44	2.10	1.79
	401284			Target Exon	1.44	1.71	1.44
	422675	BE018517	Hs.119140	eukaryotic translation initiation factor	1.44	1.68	1.45
	433020	AJ375726	Hs.279918	hypothetical protein	1.44	1.37	2.02
40	420042	AW015140	Hs.161723	ESTs	1.44	2.02	1.29
	453878	AW964440	Hs.19025	DC32	1.44	1.69	1.44
	427268	X78520	Hs.174139	chloride channel 3	1.44	1.45	1.96
	417386	AL037228	Hs.82043	D123 gene product	1.43	1.32	2.81
	409197	NS4706	Hs.303025	chromosome 11 open reading frame 24	1.43	1.80	1.17
	411009	W37572	Hs.285864	ESTs	1.43	1.57	1.72
45	433160	AW207002	Hs.134342	TASP for testis-specific adriamycin sens	1.43	1.36	1.49
	416084	L16991	Hs.79006	deoxythymidylate kinase (thymidylate kin	1.43	2.15	1.57
	407826	AA128423	Hs.40300	calpain 3, (p94)	1.43	1.61	1.69
	439070	AJ733278	Hs.7621	ESTs	1.43	2.10	1.40
	444090	S69115	Hs.10306	natural killer cell group 7 sequence	1.43	2.09	1.24
50	420162	BE378432	Hs.95577	cyclin-dependent kinase 4	1.43	2.13	1.54
	442591	AW292797		hypothetical protein MGC10772	1.43	2.11	1.61
	451668	Z43948	Hs.326444	cartilage acidic protein 1	1.43	1.49	1.16
	423639	AB037826	Hs.130411	KIAA1405 protein	1.42	2.08	1.51
	426234	BE314534	Hs.168159	apoptosis regulator	1.42	1.57	1.31
55	424263	M77640	Hs.1757	L1 cell adhesion molecule (hydrocephalus	1.42	1.88	1.63
	430294	AJ538226	Hs.32976	guanine nucleotide binding protein 4	1.42	1.46	3.18
	447126	AW150632	Hs.170307	Ral guanine nucleotide exchange factor R	1.42	1.36	1.38
	432241	AJ937060	Hs.6298	KIAA1151 protein	1.42	1.58	1.98
	412471	M63193	Hs.73946	endothelial cell growth factor 1 (platelet	1.41	2.09	1.29
60	434262	AF121858	Hs.12169	sorting nexin 8	1.41	3.07	1.41
	432238	AL133057	Hs.274135	Homo sapiens mRNA; cDNA DKFZp434K1815 (f	1.41	1.82	1.43
	402474			NM_004079: Homo sapiens cathepsin S (CTSS	1.41	1.32	1.24
	419897	X90826	Hs.93649	upstream transcription factor 2, c-fos l	1.41	1.69	1.80
	417621	AV654694	Hs.82316	interferon-induced, hepatitis C-associated	1.41	1.22	1.74
65	424441	X14850	Hs.147097	H2A histone family, member X	1.41	1.74	2.15
	406663	U24683		immunoglobulin heavy constant mu	1.41	1.51	2.03
	409614	BE297412	Hs.55189	hypothetical protein	1.41	1.54	2.20
	443885	H91806	Hs.15284	ESTs	1.41	1.19	1.41
	412276	BE262621	Hs.73798	macrophage migration inhibitory factor (	1.40	1.88	1.24
70	425179	AJ224442	Hs.155020	putative methyltransferase	1.40	1.84	1.47
	418699	BE539639	Hs.173030	ESTs, Weakly similar to ALU8_HUMAN ALU S	1.40	1.27	2.79
	432403	AA550815	Hs.124840	ESTs	1.40	1.83	1.44
	417389	BE260964	Hs.82045	midkine (neurite growth-promoting factor	1.40	1.65	2.51
	422596	AF063611	Hs.118633	Z-5'-oligoadenylate synthetase-like	1.40	2.57	1.44
75	435292	N20514	Hs.172965	ESTs	1.40	1.91	1.43
	419424	BE041820	Hs.38516	Homo sapiens, clone MGC:15887, mRNA, com	1.39	1.57	1.37
	425068	AL048716	Hs.154387	KIAA0103 gene product	1.39	1.27	3.18
	426020	AL110195	Hs.166017	microphthalmia-associated transcription	1.39	2.26	1.40
	427740	BE242604	Hs.180616	CD36 antigen (collagen type I receptor,	1.39	1.76	0.99
80	403022			C21000178: gij7341207[gb]AAF61215.1[AF22	1.39	1.74	1.36
	416111	AA033813	Hs.79018	chromatin assembly factor 1, subunit A (	1.39	1.72	1.39
	410103	AW903666		gb:CM4-NN1032-280300-122-b02 NN1032 Homo	1.39	1.46	1.34
	439180	AJ393742	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	1.39	1.35	1.79
	414057	AI815559	Hs.75730	signal recognition particle receptor (d	1.39	1.49	1.17



5	416511	NM_006762	Hs.79356	Lysosomal-associated multispanning membr	1.39	1.52	1.44
	423984	AF163825	Hs.136713	pre-B lymphocyte gene 3	1.39	3.02	1.52
	448484	BE613340	Hs.334725	Homo sapiens, Similar to RIKEN cDNA 9430	1.38	1.81	1.39
	436856	AI469355	Hs.127310	ESTs	1.38	1.35	0.99
	437179	AA393508		serologically defined colon cancer antig	1.38	1.26	4.14
	437912	BE278594	Hs.5912	F-box only protein 7	1.38	2.03	1.40
	448664	AI879317	Hs.334691	splicing factor 3a, subunit 1, 120kD	1.38	1.52	1.38
	439981	AI348408	Hs.124675	ESTs, Weakly similar to T14742 hypotheti	1.38	1.48	1.38
10	432812	AI935412	Hs.30162	ESTs	1.38	1.43	2.18
	406826	AW516005	Hs.84298	CD74 antigen (invariant polypeptide of m	1.38	1.87	1.28
	446962	AI351421	Hs.279709	muscle specific ring finger protein 1	1.38	1.46	2.23
	408787	NM_014784	Hs.47822	Rho guanine exchange factor (GEF) 11	1.38	1.98	1.50
	428044	AA093322	Hs.301404	RNA binding motif protein 3	1.38	1.29	2.04
15	412926	AI879076	Hs.75061	macrophage myristoylated alanine-rich C	1.38	1.52	2.62
	418255	AW135405	Hs.37251	ESTs	1.38	1.44	1.75
	419745	AF042001	Hs.93005	slug (chicken homolog), zinc finger prot	1.37	1.51	1.37
	448977	X91809	Hs.22698	regulator of G-protein signaling 19	1.37	1.98	1.45
	422609	Z46023	Hs.118721	siatidase 1 (lysosomal siatidase)	1.37	1.75	1.31
	435458	F11872	Hs.4892	Homo sapiens clone 24841 mRNA sequence	1.37	1.38	2.80
20	425081	X74794	Hs.154443	minichromosome maintenance deficient (S.	1.37	1.61	1.62
	429849	U33053	Hs.2499	protein kinase C-like 1	1.37	1.71	1.45
	407103	AA424881	Hs.256301	hypothetical protein MGC13170	1.37	1.62	1.82
	452923	BE276018	Hs.288940	five-span transmembrane protein M83	1.37	1.86	1.37
25	453941	U39817	Hs.36820	Bloom syndrome	1.37	1.59	1.37
	446755	AW451473	Hs.16134	serine/threonine kinase 10	1.37	1.82	1.48
	439755	AW748482	Hs.77873	B7 homolog 3	1.36	2.10	1.35
	447630	AI660149	Hs.44865	lymphoid enhancer-binding factor 1	1.36	1.79	1.67
	413821	AA844126	Hs.55964	ESTs, Weakly similar to C4HU complement	1.36	1.91	1.39
	445823	AI478563	Hs.145519	FKSG87 protein	1.36	1.29	0.33
30	456760	AW961251	Hs.127828	guanine nucleotide binding protein (G pr	1.36	1.33	2.01
	402542			Target Exon	1.36	1.66	1.46
	451050	AW937420		ESTs	1.36	2.00	1.36
	444501	AW247624	Hs.11342	ninjurin 1	1.36	1.59	1.14
35	413291	NM_005278	Hs.75268	sialyltransferase 4C (beta-galactosidase	1.36	2.55	1.42
	438129	AA778647		gb:af17d03.s1 Soares_testis_NHT Homo sap	1.36	1.46	1.32
	428398	AI249368	Hs.98558	ESTs	1.36	1.25	4.95
	439704	AW020018	Hs.293267	ESTs	1.36	1.84	1.48
40	428782	X12830	Hs.193400	Interleukin 6 receptor	1.36	1.27	0.58
	437316	AI683454	Hs.46801	GCN5 (general control of amino-acid synt	1.35	2.10	1.29
	439246	AI498072		membrane-associated tyrosine- and threon	1.35	1.81	1.63
	403409			NM_005929:Homo sapiens antigen p97 (meta	1.35	1.64	1.35
	446342	BE298665	Hs.14846	Homo sapiens mRNA: cDNA DKFZp564D016 (tr	1.35	1.37	2.33
	437740	AA810265	Hs.122915	ESTs	1.35	1.91	1.35
45	423973	AF038461	Hs.136574	arachidonate 12-lipoxygenase, 12R type	1.35	1.53	1.10
	421506	BE302796	Hs.105097	thymidine kinase 1, soluble	1.35	1.89	1.57
	457760	AA668123	Hs.134170	ESTs	1.35	2.03	1.43
	439769	AA448828	Hs.30596	Homo sapiens mRNA full length insert cDN	1.35	2.06	1.41
	406824	AW515961	Hs.84298	CD74 antigen (invariant polypeptide of m	1.35	1.77	1.27
50	429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	1.35	1.52	0.51
	421777	BE562088	Hs.108196	HSPC037 protein	1.34	1.65	1.61
	400328	X87344		transporter 2, ATP-binding cassette, sub	1.34	1.77	1.02
	421445	AA913059	Hs.104433	Homo sapiens, clone IMAGE:4054868, mRNA	1.34	1.77	1.15
	428977	AK001404	Hs.194698	cyclin B2	1.34	1.53	1.82
55	418283	S79895	Hs.83942	cathepsin K (pseudosialosin)	1.34	1.33	3.45
	425848	BE242709	Hs.159637	valyl-tRNA synthetase 2	1.34	2.11	1.32
	431211	M86849	Hs.323733	gap junction protein, beta 2, 26kD (conn	1.34	1.27	1.97
	422758	AF152329	Hs.284180	protocatherin gamma subfamily C, 3	1.34	1.61	1.75
	421579	NM_002975	Hs.105927	stem cell growth factor, lymphocyte secr	1.34	1.75	1.81
60	416374	NM_001154	Hs.300711	antrixin A5	1.34	1.68	1.55
	451092	AI207256	Hs.13766	Homo sapiens mRNA for FLJ00074 protein,	1.34	1.87	0.81
	424778	AA251048	Hs.153042	lymphocyte antigen 9	1.34	1.94	1.42
	421703	AI936513	Hs.1416	Fc fragment of IgE, low affinity II, rec	1.33	2.19	1.48
	416700	AW498958	Hs.343475	cathepsin D (lysosomal aspartyl protease	1.33	1.96	1.18
65	425923	NM_005026	Hs.162808	phosphoinositide-3-kinase, catalytic, de	1.33	1.70	1.60
	418803	U50079	Hs.88556	histone deacetylase 1	1.33	1.28	2.65
	427730	AW250549	Hs.180577	granulin	1.33	2.09	1.35
	441174	BE312775	Hs.294005	Homo sapiens, clone IMAGE:3050476, mRNA,	1.33	2.05	1.33
	412738	N34731	Hs.74562	siah binding protein 1; FBP interacting	1.33	1.85	1.35
70	424528	AW073971	Hs.238954	ESTs, Weakly similar to KIAA1204 protein	1.33	1.31	2.06
	422599	BE387202	Hs.118638	non-metastatic cells 1, protein (NM23A)	1.33	1.77	1.43
	422997	BE018212	Hs.122908	DNA replication factor	1.33	1.91	1.39
	415323	BE269352	Hs.949	neutrophil cytosolic factor 2 (65kD, chr	1.33	1.16	0.60
	409119	AA531133	Hs.4253	hypothetical protein MGC2574	1.33	1.52	1.34
75	419652	AL157485	Hs.91973	hypothetical protein	1.32	2.07	1.29
	415697	AI385603	Hs.198271	DKFZP566I024 protein	1.32	2.00	1.33
	434359	AF129536	Hs.284226	F-box only protein 6	1.32	2.07	1.39
	442932	AA457211	Hs.8858	bromodomain adjacent to zinc finger doma	1.32	1.25	1.91
	444029	AW160993	Hs.326292	hypothetical gene DKFZp434A1114	1.32	1.63	1.44
80	456974	M12529	Hs.169401	apolipoprotein E	1.32	1.47	0.85
	447733	AF157482	Hs.19400	MAD2 (mitotic arrest deficient, yeast, h	1.32	2.51	1.23
	448610	NM_006157	Hs.21602	nel (chicken)-like 1	1.31	3.12	1.31
	426490	NM_001621	Hs.170087	aryl hydrocarbon receptor	1.31	1.21	1.65
	427584	BE410293	Hs.179718	v-myb avian myeloblastosis viral oncogen	1.31	1.68	1.47

5	417059	AL037672	Hs.81071	extracellular matrix protein 1	1.31	1.30	2.14
	407777	AA161071	Hs.71465	squalene epoxidase	1.31	1.45	1.43
	408536	AW381532	Hs.135188	ESTs	1.31	1.38	0.90
	410423	AW402432	Hs.63489	protein tyrosine phosphatase, non-recept	1.31	1.81	1.49
	422486	BE514492	Hs.117487	gene near HD on 4p16.3 with homology to	1.31	1.63	1.31
	409154	U72882	Hs.50842	interferon-induced protein 35	1.31	1.69	1.29
	425003	AF119046	Hs.154149	apurinic/apyrimidinic endonuclease(APEX	1.31	1.74	1.39
	441406	Z45957	Hs.7837	phosphoprotein regulated by mitogenic pa	1.31	1.43	0.94
10	421975	AW961017	Hs.6459	hypothetical protein FLJ11856	1.30	2.53	1.34
	417361	NM_000275	Hs.82027	oculocutaneous albinism II (pink-eye dil	1.30	1.38	1.38
	425676	AW410656	Hs.159161	Rho GDP dissociation inhibitor (GDI) atp	1.30	2.11	1.36
	427289	AJ097346		phosphoserine aminotransferase	1.30	2.27	1.48
	427747	AW411425	Hs.180655	serine/threonine kinase 12	1.30	1.68	1.79
15	422296	AA360231	Hs.114416	Homo sapiens, Similar to transducin (bet	1.30	1.50	1.30
	436481	AA379597	Hs.5199	HSPC150 protein similar to ubiquitin-con	1.30	1.42	2.13
	423062	NM_003655	Hs.5637	ESTs	1.30	1.58	1.30
	439740	AL365512	Hs.6657	hypothetical protein BK1048E9.5	1.30	1.77	1.35
	409340	BE174629	Hs.321130	hypothetical protein MGC2771	1.30	1.57	1.51
20	416920	AA176455	Hs.80475	polymerase (RNA) II (DNA directed) polyp	1.30	1.67	1.44
	430451	AA836472	Hs.297939	cathepsin B	1.30	1.49	1.16
	457400	AF032906	Hs.252549	cathepsin Z	1.30	1.40	1.21
	403506			C3001912.gij66776471ref(NP_033602.1) zin	1.29	1.88	1.26
	424867	AJ024860	Hs.153591	Not56 (D. melanogaster)-like protein	1.29	2.64	1.31
25	408815	AW957974	Hs.25485	hypothetical protein FLJ22341	1.29	1.79	1.36
	416322	BE019494	Hs.79217	pyrroline-5-carboxylate reductase 1	1.29	1.59	1.80
	440795	AA262133	Hs.99741	ESTs, Weakly similar to PNL1_HUMAN PEANU	1.29	2.01	1.43
	421846	AA017707	Hs.1432	protein kinase C substrate 80K-H	1.29	1.70	1.34
	425966	NM_0011761	Hs.1973	cyclin F	1.29	1.63	1.50
30	446766	AF083208	Hs.16178	apoptosis antagonizing transcription fac	1.29	1.71	1.40
	406827	AA971409		gb:op92o04.s1 NOL_CGAP_Lu5 Homo sapiens	1.29	2.04	1.35
	418613	AA744529	Hs.86575	mitogen-activated protein kinase kinase	1.29	1.41	1.94
	443086	AW977125		sine oculis homeobox (Drosophila) homolo	1.29	1.24	1.29
	439146	AW138909	Hs.156110	immunoglobulin kappa constant	1.29	1.99	1.36
35	434398	AA121098	Hs.3838	serum-inducible kinase (SNK)	1.29	1.18	1.32
	418322	AA284166	Hs.84113	cyclin-dependent kinase inhibitor 3 (CDK	1.29	1.31	2.19
	400261			Eos Control	1.29	1.59	1.36
	413781	J05272	Hs.850	IMP (inosine monophosphate) dehydrogenas	1.29	1.67	1.53
40	412315	AW936678		gb:PM2-0T0023-080300-004-s04 DT0023 Homo	1.28	1.26	1.07
	420372	AW960049	Hs.293660	Homo sapiens, clone IMAGE:3535476, mRNA,	1.28	1.85	1.40
	425449	X52056	Hs.157441	spleen focus forming virus (SFFV) provir	1.28	1.45	1.14
	454478	AW805749		superoxide dismutase 2, mitochondrial	1.28	2.29	1.07
	410275	U85658	Hs.61796	transcription factor AP-2 gamma (activat	1.28	1.20	0.93
	406016			Target Exon	1.28	1.47	1.31
45	449609	BE246434	Hs.289026	guanine nucleotide binding protein (G pr	1.28	1.26	3.02
	426059	BE292842	Hs.166120	interferon regulatory factor 7	1.28	1.76	1.23
	412773	H15785	Hs.74573	similar to vaccinia virus HindIII K4L OR	1.28	1.60	1.30
	452700	AJ859390	Hs.288940	five-span transmembrane protein M83	1.28	1.51	1.22
	408543	N78098	Hs.44289	ESTs	1.28	2.02	1.08
50	408822	AW500715	Hs.57079	Homo sapiens cDNA FLJ13267 fs, clone OV	1.27	1.28	3.51
	425069	AA687465	Hs.298184	potassium voltage-gated channel, shaker-	1.27	1.66	1.39
	444681	AJ243937	Hs.288316	chromosome 6 open reading frame 9	1.27	1.47	1.55
	430794	NM_000166	Hs.333303	gap junction protein, beta 2, 26kD (conn	1.27	1.81	0.89
	430637	BE160081	Hs.256290	S100 calcium-binding protein A11 (calgiz	1.27	1.35	1.68
55	440502	AJ824113	Hs.78281	regulator of G-protein signaling 12	1.27	1.67	1.31
	441598	AJ733219	Hs.58262	ESTs	1.27	1.30	1.30
	431921	N46466	Hs.58879	ESTs	1.27	2.00	1.16
	459345	AW503672		gb:UH-HF-BN0-ald-h-11-0-ULr1 NIH_MGC_50	1.26	1.44	1.33
	452436	BE077546	Hs.31447	ESTs, Moderately similar to A46010 X-4in	1.26	1.20	1.45
60	426334	BE305081	Hs.169358	hypothetical protein	1.26	1.22	1.89
	414044	BE614194	Hs.75721	profilin 1	1.26	1.48	1.51
	405268			ENSP00000223174*:KIAA0783 PROTEIN.	1.26	1.19	2.25
	416602	NM_006159	Hs.79389	Protein kinase C-binding protein NELL2	1.26	1.19	4.03
	439529	BE293452	Hs.293984	hypothetical protein MGC13102	1.26	1.83	1.19
65	421254	AK001724	Hs.102950	coat protein gamma-coop	1.26	1.61	1.23
	417785	X59812	Hs.82568	cytochrome P450, subfamily XXVIA (stero	1.26	1.84	0.68
	419395	BE268326	Hs.90280	5-aminimidazole-4-carboxamide ribonucle	1.26	1.66	1.34
	418968	NM_0000078	Hs.89538	cholesteryl ester transfer protein, plas	1.26	1.42	1.19
	441553	AA281219	Hs.121296	ESTs	1.26	1.29	1.28
70	446619	AJ076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	1.25	1.22	0.65
	424624	AB032947	Hs.151301	Ca2-dependent activator protein for secr	1.25	1.17	2.95
	450087	BE293180	Hs.24379	MUM2 protein	1.25	1.78	1.28
	429604	AK001851	Hs.210778	hypothetical protein FLJ10989	1.25	1.18	1.25
	429380	AF023268	Hs.200600	secretory carrier membrane protein 3	1.25	2.22	1.25
75	440251	AW756016	Hs.332012	Homo sapiens, clone IMAGE:3687782, mRNA,	1.25	1.90	1.39
	416759	AK000978	Hs.79741	hypothetical protein FLJ10116	1.24	1.32	1.53
	435466	BE619165	Hs.29203	G protein beta subunit-like	1.24	1.96	1.32
	450621	AW297288	Hs.55918	hypothetical protein FLJ11354	1.24	1.61	1.27
80	400214			NM_007002:Homo sapiens cell membrane gly	1.24	1.88	1.32
	435013	H91923	Hs.110024	NM_020142:Homo sapiens NADH:ubiquinone o	1.24	1.76	1.25
	414733	BE514535	Hs.77171	mitochondrion maintenance deficient (S.	1.24	1.82	1.42
	406851	AA609784		major histocompatibility complex, class	1.24	1.68	1.19
	448498	AA118276		ESTs	1.24	1.73	1.29
	440087	W28969	Hs.7718	hypothetical protein FLJ22678	1.24	1.70	1.38

5	411365	M76477	Hs.289082	GM2 ganglioside activator protein	1.24	1.61	1.16
	426502	Y07759	Hs.170157	myosin VA (heavy polypeptide 12, myosin)	1.24	2.65	1.24
	452056	AW955065	Hs.101150	Homo sapiens, clone IMAGE:4054156, mRNA	1.24	1.49	1.50
	427390	A432163	Hs.268231	Homo sapiens cDNA: FLJ23111 fs, clone L	1.24	1.17	2.10
	429954	A1918130	Hs.21374	ESTs	1.23	1.19	4.77
	421178	BE267994	Hs.102419	zinc finger protein	1.23	1.62	1.28
	442609	AL020996	Hs.8518	setenoprotein N	1.23	2.30	1.24
	416188	BE157260	Hs.79070	v-myc avian myelocytomatosis viral oncog	1.23	1.18	0.90
10	410127	AA354313	Hs.58685	CD5 antigen (p56-62)	1.23	1.68	1.23
	452244	N33530	Hs.176674	ESTs	1.23	2.93	1.23
	406718	AA505525	Hs.169476	glyceraldehyde-3-phosphate dehydrogenase	1.23	1.56	1.29
	436939	AA853680	Hs.5345	arginyl aminopeptidase (aminopeptidase B	1.23	1.68	1.23
	414457	AW514320	Hs.76159	ATPase, H transporting, lysosomal (vacuo	1.23	1.58	1.20
15	416929	N20535		melastatin 1	1.23	1.92	1.20
	401106			Target Exon	1.23	1.82	1.29
	408981	AW500797	Hs.49427	Gem-interacting protein	1.23	1.40	1.59
	413317	U53225	Hs.75283	sorting nexin 1	1.23	1.43	1.44
	422481	AL050163	Hs.117339	DNAX-activation protein 10	1.23	1.71	1.24
	425455	AL137522	Hs.157777	casein kinase 1, gamma 1	1.23	1.95	1.29
20	451524	AK001466	Hs.26516	hypothetical protein FLJ10604	1.23	2.07	1.27
	414399	L47345	Hs.155202	transcription elongation factor B (SII)	1.22	1.87	1.19
	422034	AC006486	Hs.333069	Ets2 repressor factor	1.22	1.55	1.21
	434224	AA380731	Hs.84	interleukin 2 receptor, gamma (severe co	1.22	1.55	1.51
	429574	BE268321	Hs.208912	hypothetical protein MGC861	1.22	1.49	1.46
25	411742	AW247593	Hs.71819	eukaryotic translation initiation factor	1.22	1.64	1.40
	449027	AJ271216	Hs.22880	dipeptidyl peptidase III	1.22	1.63	1.30
	418004	U37519	Hs.87539	aldehyde dehydrogenase 3 family, member	1.22	1.24	0.71
	451481	AA300228	Hs.295866	hypothetical protein DKFZP434N1923	1.22	2.20	1.26
	422739	H20106	Hs.119591	adaptor-related protein complex 2, sigma	1.21	1.55	1.21
30	424326	NM_014479	Hs.145296	ADAM-like disintegrin protease, decysin	1.21	1.13	3.29
	404166			NM_019602:Homo sapiens butyrophilin-like	1.21	1.59	1.21
	447604	AW089933	Hs.301342	hypothetical protein MGC4342	1.21	1.25	2.00
	427979	BE379776	Hs.181309	proteasome (prosome, macropain) subunit,	1.21	1.14	1.25
	414509	AW161311	Hs.76294	CD63 antigen (melanoma 1 antigen)	1.21	1.39	1.25
35	428468	AA171388	Hs.184482	DKFZP586D0624 protein	1.21	1.66	1.22
	419700	AF084935	Hs.92357	galactokinase 1	1.21	1.63	0.74
	430948	A1347578	Hs.124015	hypothetical protein MGC2605	1.21	1.48	1.21
	448143	AF039704	Hs.20478	ceroid-lipofuscinosis, neuronal 2, late	1.20	1.75	1.23
40	448499	BE613280	Hs.77550	hypothetical protein MGC1780	1.20	1.54	1.29
	442173	N76101	Hs.8127	KIAA0144 gene product	1.20	1.54	1.31
	409632	V74001	Hs.55279	serine (or cysteine) proteinase inhibitor	1.20	1.18	1.11
	448230	BE395949	Hs.94814	hypothetical protein MGC2865	1.20	1.83	1.19
	403817			NM_015271:Homo sapiens tripartite motif-	1.20	1.22	1.61
45	411678	A1907114	Hs.71465	squalene epoxidase	1.20	1.15	2.01
	452423	AA991724	Hs.180535	hypothetical protein MGC10966	1.20	1.79	1.20
	424046	AF027856	Hs.138202	serine (or cysteine) proteinase inhibitor	1.20	2.34	1.20
	447233	AW246333	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	1.20	1.93	1.20
	422565	BE259035	Hs.118400	singed (Drosophila)-like (sea urchin fas	1.20	1.32	1.52
50	446159	NM_013379	Hs.14089	dipeptidyl peptidase 7	1.19	1.64	1.22
	434563	AW083994	Hs.9469	pleckstrin homology domain-containing, 1	1.19	1.53	1.45
	421541	NM_003942	Hs.105584	ribosomal protein S6 kinase, 90kD, polyp	1.19	1.75	1.27
	450706	AW167578	Hs.14691	ESTs, Moderately similar to 138022 hypot	1.19	1.71	1.22
	430381	NM_006411	Hs.240534	1-acylglycerol-3-phosphate O-acyltransfe	1.19	1.66	1.21
55	426329	AL389951	Hs.271623	nucleoporin 50kD	1.19	1.17	1.55
	421612	AF161254	Hs.106196	BD6 antigen	1.19	1.73	1.30
	410182	NM_001983	Hs.59544	excision repair cross-complementing rodo	1.19	1.75	1.18
	434171	BE247688	Hs.347349	KIAA0948 protein	1.18	1.73	1.09
	424837	BE276113	Hs.333034	N-acetyltransferase, homolog of S. cerev	1.18	2.13	1.22
60	428293	BE250944	Hs.183556	solute carrier family 1 (neutral amino a	1.18	1.45	1.30
	453754	AW972580	Hs.172753	ESTs	1.18	1.71	1.35
	439012	BE383814	Hs.6455	RuvB (E coli homolog)-like 2	1.18	1.60	1.23
	422256	M64673	Hs.1499	heat shock transcription factor 1	1.18	1.51	1.28
	439863	BE547830	Hs.9408	paired immunoglobulin-like receptor beta	1.18	1.89	1.18
65	430513	AJ012008	Hs.241586	G6C protein	1.18	2.07	0.81
	427283	AL119796	Hs.174185	ectonucleotide pyrophosphatase/phosphodi	1.18	1.13	3.25
	441648	H05734	Hs.30559	ESTs	1.18	1.56	1.23
	418219	AA731836	Hs.137319	ESTs	1.18	1.77	1.23
	406422			Target Exon	1.18	1.43	1.31
70	414823	AA156531	Hs.103902	ESTs, Weakly similar to A44861 keratin,	1.18	1.66	1.23
	425720	AA362394	Hs.293984	hypothetical protein MGC13102	1.18	1.58	1.15
	419250	AW770185		US snRNP-specific protein, 116 kD	1.17	1.74	1.21
	454390	AB020713	Hs.56966	KIAA0906 protein	1.17	1.33	1.35
	428471	X57348	Hs.184510	stratulin	1.17	1.19	1.24
75	430200	BE613337	Hs.234896	geminin	1.17	1.13	1.96
	412965	L06419	Hs.75093	procollagen-lysine, 2-oxoglutarate 5-dio	1.17	1.50	1.22
	430122	NM_013342	Hs.233765	TCF3 (E2A) fusion partner (in childhood	1.17	1.69	1.32
	430512	AF182294	Hs.241578	U6 snRNA-associated Sm-like protein LSm8	1.17	1.12	2.44
	417080	BE392846	Hs.1063	small nuclear ribonucleoprotein polypept	1.17	1.93	1.18
80	423102	AW067812	Hs.303025	chromosome 11 open reading frame 24	1.17	1.89	1.17
	408393	AW015318	Hs.23165	ESTs	1.16	1.10	1.91
	424292	AA338432		gb:EST43554 Fetal brain I Homo sapiens c	1.16	1.61	1.21
	446759	R61463	Hs.16165	expressed in activated T/LAK lymphocytes	1.16	1.45	1.23
	427324	AA159587	Hs.285932	hypothetical protein FLJ23322	1.16	1.50	1.23

5	446055	AJ815981	Hs.12909	mucofipin 1	1.16	1.49	1.10
	414432	BE378174	Hs.26506	Homo sapiens clone CDABP0005 mRNA sequen	1.16	1.67	1.20
	417900	BE250127	Hs.82906	CDC20 (cell division cycle 20, S. cerevi	1.16	1.66	1.32
	411305	BE241596	Hs.69547	myelin basic protein	1.16	1.15	4.29
	438930	AW843633	Hs.343261	hypothetical protein AL110115	1.16	1.37	1.34
	407239	AA076350	Hs.67846	leukocyte immunoglobulin-like receptor,	1.15	1.82	1.17
	427458	BE208364	Hs.29283	ESTs, Weakly similar to UKHU proteoglyca	1.15	1.46	1.32
	402160			Target Exon	1.14	1.23	1.12
10	416881	N32520	Hs.141358	ESTs	1.14	2.42	1.14
	420223	N27807		ribosomal protein L4	1.14	1.23	1.14
	450778	U81375	Hs.25450	solute carrier family 29 (nucleoside tra	1.14	1.38	1.27
	429538	BE182592	Hs.139322	small proline-rich protein 2A	1.14	1.16	3.52
	428342	AJ739168		Homo sapiens cDNA FLJ13458 fs, clone PL	1.13	1.13	1.13
	436696	AA725678	Hs.120487	ESTs	1.13	1.22	1.13
15	448950	AF288687	Hs.9275	CGI-152 protein	1.12	1.52	1.19
	437696	Z83844	Hs.5790	hypothetical protein dJ37E16.5	1.12	1.31	1.08
	425009	X58288	Hs.154151	protein tyrosine phosphatase, receptor t	1.12	1.08	1.20
	412099	U64188	Hs.73165	interleukin 12 receptor, beta 2	1.12	2.90	1.12
	407951	W77762	Hs.79015	antigen identified by monoclonal antibod	1.12	1.11	3.43
20	408116	AA251393	Hs.289052	Homo sapiens, Similar to RIKEN cDNA 5430	1.12	1.50	1.12
	450296	AL041949	Hs.24756	hepatocyte growth factor-regulated tyros	1.11	1.48	1.12
	420697	AA827705	Hs.26605	ESTs	1.11	2.19	1.11
	438915	AA280174	Hs.285681	Williams-Beuren syndrome chromosome regi	1.11	2.73	1.11
	418399	AF131781	Hs.84753	hypothetical protein FLJ12442	1.10	1.43	1.14
25	450358	AB010098	Hs.24907	coronin, actin-binding protein, 2B	1.10	1.35	1.19
	444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	1.10	1.43	1.10
	408801	AI866590	Hs.63405	Homo sapiens, clone IMAGE:3609337, mRNA,	1.10	1.53	1.14
	402622			C1003392:g[12314272]emb[CAC00591.1] (A	1.10	1.59	1.06
30	418661	NM_001949	Hs.1189	E2F transcription factor 3	1.09	1.82	1.09
	442680	BE270707	Hs.8583	similar to APOBEC1	1.09	1.49	1.24
	439702	AW085525	Hs.55964	ESTs	1.09	1.68	1.09
	423858	AL137326	Hs.133483	Homo sapiens mRNA; cDNA DKFZp43480650 (I	1.09	1.10	1.73
	443759	BE390832	Hs.134729	FXD domain-containing ion transport reg	1.09	1.23	1.25
	414396	BE548266	Hs.76057	galactose-4-epimerase, UDP-	1.09	1.07	1.23
35	401558			ENSP00000220478:SECRETORANIN III.	1.08	1.54	1.08
	428411	AW291464	Hs.10338	ESTs	1.08	1.07	6.19
	422051	AW327546	Hs.111024	solute carrier family 25 (mitochondrial	1.08	1.25	0.93
	414694	NM_015362	Hs.76907	HSPC002 protein	1.08	1.18	1.12
40	453883	AI538516	Hs.347524	cofactor required for Sp1 transcriptiona	1.07	1.15	1.31
	420856	BE513294	Hs.205736	HLA class II region expressed gene KE2	1.06	1.47	1.08
	412265	AA101325	Hs.86154	hypothetical protein FLJ12457	1.06	1.17	1.22
	429259	AA420450	Hs.292911	Platophilin	1.06	1.08	0.73
	417381	AF164142	Hs.82042	solute carrier family 23 (nucleoside tra	1.05	1.04	0.84
45	415825	Y18024	Hs.78877	inositol 1,4,5-trisphosphate 3-kinase B	1.05	1.09	1.37
	444438	N32755	Hs.322489	ESTs	1.04	1.13	1.05
	407394	AF005081		gb:Homo sapiens skin-specific protein (x	1.04	1.22	0.78
	404960			eyes absent (Drosophila) homolog 3	1.04	1.06	1.04
	408972	AL050100	Hs.49378	DKFZP586D0919 protein	1.04	1.09	1.13
50	414477	U41635	Hs.76228	amplified in osteosarcoma	1.03	1.11	1.03
	409327	L41162	Hs.53563	collagen, type IX, alpha 3	1.03	1.02	2.33
	435056	AW023337	Hs.5422	glycoprotein M6B	1.03	1.02	3.56
	415314	N88802	Hs.5422	glycoprotein M6B	1.02	1.02	4.02
	408591	AF015224	Hs.46452	mammaglobin 1	1.00	1.41	0.05
55	401203			Target Exon	1.00	1.02	0.98
	400304	AF005082	Hs.113261	Homo sapiens skin-specific protein (xp33	1.00	1.49	0.56
	407395	AF005082		gb:Homo sapiens skin-specific protein (x	1.00	1.69	0.91
	411388	X72925	Hs.69752	desmocollin 1	1.00	3.12	1.00
	428618	AA885360		Target CAT	1.00	1.77	1.00
60	402860			ENSP00000239210:DJ50024.4 (novel protein	1.00	1.53	1.00
	437211	AA382207	Hs.5509	ecotropic viral integration site 2B	1.00	1.39	1.00
	409269	AA576953	Hs.22972	steroid 5 alpha-reductase 2-like; HSAR g	1.00	1.46	1.00
	409190	AU076536	Hs.50984	sarcoma amplified sequence	1.00	0.80	1.00
	416143	AI955650		glutamyl-peptide cyclotransferase (glu	1.00	1.96	1.00
65	401588			C15000180:g[544344]sp[Q05859]FOR4, MOUS	1.00	2.04	1.00
	419519	AI198719	Hs.176376	ESTs	1.00	1.91	1.00
	448816	AB033052	Hs.22151	KIAA1226 protein	1.00	1.82	1.00
	440270	NM_015986	Hs.7120	cytokine receptor-like molecule 9	1.00	1.15	1.00
	418618	U66097	Hs.86724	GTP cyclohydrolase 1 (dopa-responsive dy	1.00	1.66	0.74
70	422836	AL037365	Hs.194093	AKAP-binding sperm protein ropporin	1.00	2.21	1.00
	452461	N78223	Hs.108106	transcription factor	1.00	1.61	1.00
	428479	Y00272	Hs.334562	cell division cycle 2, G1 to S and G2 to	1.00	1.42	1.00
	422420	U03398	Hs.1524	tumor necrosis factor (ligand) superfam	1.00	1.81	1.00
	429477	AI275514	Hs.6658	ESTs	1.00	1.67	1.00
	454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	1.00	1.05	1.00
75	416209	AA236776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	1.00	1.79	1.00
	451993	AA765776	Hs.122983	ESTs	1.00	2.15	1.00
	416947	N23282	Hs.184341	ESTs, Weakly similar to B34087 hypotheli	1.00	1.67	1.00
	441606	R37263	Hs.21065	ESTs, Moderately similar to PC4259 ferri	1.00	1.87	1.00
80	442590	AI002686	Hs.130313	ESTs	1.00	2.59	1.00
	404831			C1002937:g[7499208]pir[120993] hypothe	1.00	1.44	1.00
	428454	U55936	Hs.184376	synaptosomal-associated protein, 23kD	1.00	1.47	1.00
	419717	H07970	Hs.92458	G protein-coupled receptor 19	1.00	1.78	1.00
	408611	NM_004367	Hs.46468	chemokine (C-C motif) receptor 6	1.00	1.64	1.00

5	421666	AL035250	Hs.1408	endothelin 3	1.00	0.63	1.00
	446155	A1553695	Hs.159422	Homo sapiens cDNA FLJ13997 fis, clone Y7	1.00	1.60	1.00
	423899	NM_001427	Hs.134989	engrailed homolog 2	1.00	2.91	1.00
	423130	AW897586	Hs.21213	ESTs	1.00	1.65	1.00
	433843	AW021423	Hs.112819	ESTs	1.00	2.08	1.00
	458574	AW384436	Hs.135265	Homo sapiens clone FLB8436 PRO2277 mRNA,	1.00	1.00	1.00
	430205	AB025904	Hs.235168	carbonic anhydrase XIV	1.00	1.41	1.00
	427335	AA448542	Hs.251677	G antigen 7B	1.00	1.15	1.00
	439551	A1347067	Hs.124636	ESTs	1.00	1.80	1.00
10	420248	A1377191	Hs.44714	ESTs	1.00	2.15	1.00
	446259	AA425204	Hs.334721	hypothetical protein FLJ13391	1.00	2.35	1.00
	447164	AF026941	Hs.17518	vipirin; similar to inflammatory respon	1.00	1.53	1.00
	447289	AW247017	Hs.36978	melanoma antigen, family A, 3	1.00	1.73	1.00
	408758	NM_003686	Hs.47504	exonuclease 1	1.00	1.59	1.00
15	453745	AA952989	Hs.63908	hypothetical protein MGC14726	1.00	1.73	1.00
	436609	A1022514	Hs.131380	ESTs	1.00	1.96	1.00
	419308	N40321		ghyxx80g07.r1 Soares melanocyte 2NbHM Ho	1.00	2.28	1.00
	421650	AA781795	Hs.122587	ESTs	1.00	1.74	1.00
	459678	AW612538	Hs.304491	EST	1.00	2.16	1.00
20	446152	A1292036		ESTs	1.00	1.66	1.00
	449579	AW207260	Hs.134014	ESTs, Weakly similar to T46425 hypotheli	1.00	2.04	1.00
	418673	NM_005582	Hs.87205	lymphocyte antigen 64 (mouse) homolog (	1.00	1.75	1.00
	415004	AA158925	Hs.240849	ESTs, Weakly similar to GBP1_HUMAN INTER	1.00	1.85	1.00
	426274	D38122	Hs.2007	tumor necrosis factor (ligand) superfam	1.00	1.92	1.00
25	453922	AF053306	Hs.36708	budding uninhibited by benzimidazoles 1	1.00	1.72	1.00
	417791	AW965339	Hs.44269	ESTs	1.00	1.52	1.00
	424905	NM_002497	Hs.153704	NIMA (never in mitosis gene a)-related k	1.00	2.02	1.00
	416445	AL043004	Hs.79337	KIAA135 protein	1.00	1.28	1.00
	408375	A1224520	Hs.40930	ESTs	1.00	1.92	1.00
30	406964	M21305		FGENES predicted novel secreted protein	1.00	0.46	1.00
	408522	A1541214	Hs.46320	Small proline-rich protein SPRK (human,	1.00	1.00	2.48
	412828	AL133396	Hs.74621	prion protein (p27-30) (Creutzfeld-Jakob	0.98	0.98	3.24
	422270	AF114494	Hs.114062	protein tyrosine phosphatase-like (proli	0.95	0.96	3.06
	446488	AB037782	Hs.15119	KIAA1361 protein	0.94	0.96	1.61
35	433435	BE545277	Hs.340959	Ts translation elongation factor, mitoch	0.94	0.94	0.76
	409402	AF208234	Hs.695	cystatin B (steifin B)	0.93	0.91	1.55
	423942	AF209704	Hs.169407	glycolipid transfer protein	0.92	0.93	2.09
	414219	W20010	Hs.75823	ALL1-fused gene from chromosome 1q	0.91	0.91	4.08
	429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	0.90	0.81	0.73
40	417632	R20855	Hs.5422	glycoprotein M5B	0.90	0.92	3.69
	449092	U91641		alpha2,8-sialyltransferase	0.89	0.79	0.84
	426716	NM_006379	Hs.171921	sema domain, immunoglobulin domain (Ig),	0.89	0.92	3.70
	445033	AV652402	Hs.72901	cyclin-dependent kinase inhibitor 2B (p1	0.88	0.90	2.02
	408349	BE546947	Hs.44276	homeo box C10	0.88	0.87	0.73
45	429345	R11141	Hs.199695	hypothetical protein	0.85	0.84	0.69
	451621	A1879148	Hs.26770	fatty acid binding protein 7, brain	0.84	0.85	1.32
	417022	NM_014737	Hs.80905	Ras association (RalGDS/AF-6) domain (am	0.84	0.88	3.37
	405885			Target Exon	0.81	0.71	1.00
	407788	BE514982	Hs.38991	S100 calcium-binding protein A2	0.78	0.78	0.90
50	417515	L24203	Hs.82237	ataxia-telangiectasia group D-associated	0.77	0.73	0.71
	421100	AW351839	Hs.124660	Homo sapiens cDNA: FLJ21763 fis, clone C	0.75	0.78	4.69
	440274	R24595	Hs.7122	scrapie responsive protein 1	0.74	0.78	5.42
	425071	NM_013989	Hs.154424	deiodinase, iodothyronine, type II	0.70	0.75	4.29
	412719	AW016610	Hs.816	ESTs	0.70	0.77	3.99
55	432467	T03667	Hs.239388	Human DNA sequence from clone RP1-304B14	0.69	0.73	3.79
	437191	NM_006846	Hs.331555	serine protease inhibitor, Kazal type, 5	0.65	0.64	1.11
	452487	AW207659	Hs.6630	Homo sapiens cDNA FLJ13329 fis, clone OV	0.61	0.65	3.20
	448133	AA723157	Hs.73769	folate receptor 1 (adult)	0.61	0.22	0.49
	439659	AW970780	Hs.59483	Homo sapiens cDNA FLJ14471 fis, clone MA	0.49	0.30	0.67
60	419092	J05581	Hs.89603	mucin 1, transmembrane	0.41	0.11	0.34
	417079	U65590	Hs.81134	interleukin 1 receptor antagonist	0.23	0.30	0.35

TABLE 49B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

70	Pkey	CAT Number	Accession
	430540	713_2	BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG754420 BG775028 BG824418
			BM045810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847
			A1770171 BF196861 BE856897 AA463876 A1375927 AA648810 AA948193 AA490916 AA59893 AA58188 A1240408 A191843 A131029 AW768399
			A1365196 AW337984 AW026150 BE466591 BE674599 A1818438 AA72197 A1651927 AW151143 B1198825 BC819083 BM458764 BE903567
			BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610
			BE561530 BE560537 BE903782 BE732947 B1227204 BG761305 BE262642 BE391848 BE382475 BG008258 B1547991 B1459099 BE391391 BE259420
75			BE298109 AW245422 A1423847 A1914618 H80534 BE301004 AL531791 A1435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296
			A1359493 BM018598 A1689260 AW072450 F20201 AW151405 AW515752 AA773468 BG259694 BE391163 BG621529 A1421728 BG767231 BM462953
			BG340524 W52648 AA113434 BE785431 B1041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 B1091658 N72512
			W58732 W85690 BG958989 A105206 H19721 W17051 W77958 B1262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069
			F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 A1027722 A150356 AA886395 AW977627 BE220225 AA884082 AW518114
80			A1243844 AA809493 AA481029 AA825718 A1347866 A431670 AA814435 A1251109 R07704 AA765606 AA724593 A1918399 A1537550 AA491103
			AW008188 R07703 AA989120 AA746235 AW028983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 B1860809
			BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591
			AW970601 AW613399 AA503435 AA502682 N91138

453912	32562_3	BM472224 BI966849 BI966735 AW973032 BI962894 BI963048 AA548765 AI926504 AA041551 AW043754 AI085702 AW008105 AA974849 AW614893 AA553737 AA916996 AW262982 AI580991 BF726843 AV693312 W35325 AA039927 BG460936 AW388482 AW388420 BF374777 W01360 N94710 H87967
5	420218 191547_1	AW958037 R42557 AI337047 AA948360 AI638005 AA459950 AI624915 AI638047 AI467856 AI521826 AA660305 AI932315 AW003092 AW271756 AW779380 AA609879 AI634791 AI493770 AI565211 Z41145 AI627952 AA303734 BE349457 AW196765 AA256527 BE089727
	458997 11847_4	BM453041 AA760783 BE218582 AI340046 AW166131 BF515854 AI630296 AA461307 AI090881 AW023059 AA155797 AA115486 AI597396 AW889004 AW937420 AA137082 AA013374 BG619478 BG401839
10	430015 713_2	BC017171 BC012195 NM_007126 AF100752 AI137377 Z70768 BM474865 BG754806 AI124376 BG757203 BG764420 BG775028 BG824418 BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847 AI770171 BF196861 BE856897 AA463876 AJ375927 AA648810 AA948193 AA490916 AI459893 AI458188 AI240408 AI191843 AI131029 AW768399 AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567 BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF998406 BF988930 BM475542 AW246215 BE501897 BE903610 BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE262642 BE391848 BE382475 BG008258 BI547991 BI459099 BE391391 BE259420 BE298109 AW245422 AI423847 AI914618 H05534 BE301004 AI531791 AJ435581 BF793112 AL577303 AA373265 BE746365 BE743630 BE879296 AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AI421728 BG767231 BM462953 BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512 W58732 W85690 BG958989 AI205206 H19721 W10751 W77958 BI262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069 F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114 AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814436 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103 AW008188 R07703 AA989120 AA746235 AW028933 AA789102 AI185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809 BE002760 BG746251 BE962912 BM454584 AI134894 BF104082 H05091
20	425231 235604_1	AA527161 BG211784 AA527065 AA505489 AW512550
	417282 2142_2	AK025474 U11293 AF141304 BM442402 AL539879 AI554793 AL543707 AL549509 BI753328 BG756797 BI856494 BE901116 AL556899 AU133347 BI838505 AW949559 BM012604 BG773980 BG661309 BI260149 BF436764 BG83060 BF822225 BI059728 BF917866 BF917609 BF914374 D31003 AA234218 AJ420466 BM083921 BE856788 BE669957 BF430992 AW614978 AW205958 BF110763 BF222758 AA195232 AI341353 AI668676 AI093230 AI123522 AI665694 AI208758 AA975916 AI089224 AI264922 AA256604 AA659637 BE218707 AA195203 AW999239 AW139706 N31717 AW205941 R95955 N39147 BM015411 AL576975 BF689524 AL563130 BI858155 AA417889 AL513995 AI568815 AU160593 AA836028 H84388 AL517078 AL546480 AL530507 AL561042 AA024435 W47314 AI880513 AA456116 BF836679 AW975173 H24039 AW105059 BE548113 AW370257 BM011139 AW675130 BE276045 BF933396 AL517903 AA886367 BI030596 BG477193 BF973867
30	406687 0_0	M31126
	452194 90339_1	AI694413 AW994700 AI912946 N73548 AI082035 AW271652 W24189 W24182 AI719718 AA024658 AW810120 AW015394 T79755 AA988043 AU709339
35	442643 2736_1	BC001588 BC007424 AF016369 NM_004697 BI756186 BE257019 BG500792 BI862776 AI121371 BG574833 AA703250 AA179511 AW052006 AI280150 AI914000 AI358319 AI081204 AI082594 AA992449 AI470821 AI655744 AW237529 AA678858 AI984430 BF433055 BE467594 BE467573 AI033630 AI289987 AI184802 AI681391 AW592416 AI138377 AI139266 AA961714 AI800163 AA418751 AW451928 AA668676 AI273444 AI494387 BE046912 AI276555 BF196021 AA700055 AA609305 AA772596 AI635758 AI635749 H95459 AW610290 BE464994 AA527136 BF374802 AI800175 AW195227 AI189676 BF802049 AL513632 AL554911 AL538845 BE297273 AA315321 BM451920 BE269268 BE292835 BE018128 BG755717 BM041095 BG677009 AI039691 BF995709 BE735586 BE296453 BG393609 BG824453 AI567522 AI745257 AW388641 AW301265 AI411444 AW029280 AU149362 AU152328 AA418960 AI121009 AI890398 AL528748 H13050 T47086 BI000575 BF334914 BF109661 R44450 H13259 T47087 AW388646 BF305834 AL577515 BM041600 BE889299 BF239768
40	448243 13061_2	BG166513 AA479726 BE622314 AI134913 BE006305 BE006312 BE006298 AA044582 AW994956 AA234175 AA043906 BE006303 BF327669 BE006317 BF326759 BF541959
	430441 1438_6	BG108218 BE560548 AW380115 BE269629 AI911518 AW380113 AA902964 AA455001 AI276529 AI685597 AA970496 D61084 AW380068 AW380080 R00283 C15236 AW327776 D80759
45	432810 101919_1	BG292389 C06094 AI668930 AW104534 AA310513 AA830127 AW134897 AA046953 AW965490 AI810530 BF092924 AA334151 AA334725 C31302 R20723 AA263003 BI284635 AI276287 AI684428 AI524234 AI335035 AW014704 AI911443 AA972102 AI387512 AI126670 AW016017 AI286003 AI147163 AA626033 AI539156 AA655542 AI094253 AW512612 BE889628 AA744752 BE646306 AA471324 AA999975 AA863400 H17550 AI991439 R46187 BE929954 AA333976 D63102 BF744491
50	446019 658727_1	AI362520 D25917 AI670784 AI742347 AW269789 AI270700 AW610541 AW793036 AW793035 AW610540 AW362220 AW362166 AW362214 AW362225 AW362228 AL119827
	453331 16559_1	BG517303 AA410586 AA035018 BG572117 BG620022 AA147247 BG005785 BG014448 R31981 H02668 H12498 R36203 BF992089 R73999 T49904 R75732 BI057974 T35681 AA147833 N50695 R68588 R25671 R31935 R25110 R36105 AK055628 BE157467 AW63674 AA190993 H01642 BF510304 AA626915 AA746952 AI161014 AA099554 BG572534 AI803329 AI809932 AI808765 AA411449 AI378760 AA976929 AI378620 AA909684 R75632 AI360919 AI350463 AW069127 AA411621 AA742532 H12451 BE208298 H03612 H12839 N58781 R75957 BF996484 AI240665 BF989591 BI056086 BG001590 BF107035
55	429978 35194_2	BE738425 BE738323 BM126944 AW629678 AW265195 AI916735 AI394255 AI573090 AI354442 AW612857 AI339558 AI919424 AI377532 AI354441 AI308821 AA772275 AW055215 AI589705 AI336532 AA066547 AV682125 H93575 AW071172 AW769904 AI863985 AW265018 AW196655 D79662 BE042393 N75017 AW014741 C75509 BE748621 H92431 AW079261 AW901780 AA329482 AW960115 BE260621 AI767525 R31663 BI918664 AW963196 C06195 AI678018
60	452203 2630_1	BC014081 NM_000593 X57522 L21208 L21207 L21206 L21205 L21204 AL561404 AL546423 AL560492 AL556882 AL541576 AL550654 BI823519 BI770023 AL554969 BI489906 AI304693 AW295947 BM146642 X57521 BG820143 BE898390 F06770 F12630 BM423610 AL561518 BM009470 BG742981 AA279685 AA847441 AA313737 BF172639 BF697216 BF914190 BF903647 S70277 AI569694 AW073206 AI361433 AA564644 AA487429 BE858232 AA838610 AI539114 AI719375 AI829129 BG057675 AI423422 AU158860 BE300655 AW107077 AA586956 AL571889 AL556850 AL576404 AL582800 BI256544 BF342301 BG875994 AA054458 AA353161 AI940434 BE816522 AL577636 AI479650 AW150377 AU154395 AW951271 AI032220 AI819778 AI346733 AW771150 AW512525 AI249904 AA279809 AI352549 AW512517 BG056280 AA521222 BE271141 AI581932 AL541575 BI819184 AV660190 AL556475 AI620020 AW089888 AW079179 Z21518 AA687601 F04651 AI783961 T57198 AI433367 T78652 AL554968 AA365648 AI582619 BE874601 BF804669 AI574458 BM145502 AI266514 AI538823 AI475626 AA948210 AA844054 AA487637 AA031844 AA535221 AW794256 AW361447 BE788506 AI682892 AA830989 AA862356 AA653084 BM009154 AA135727 H05927 H23433 R42244 W19997 AW366665 AW366601 AA678742 AL556474 AA135770 BE774050 BF914200 H88457 AA627746 BI560216 BI753586
70	458098 23945_1	AI082245 BE467534 AI797130 BE467063 BE467767 BE218421 AI694996 BE327781 BE327407 BE833829 AA989054 AA459718 BE833855 BE550224 AA832519 AF086393 AV733386 BE465409 N29245 W07677 AA482971 BE503548 H18151 AA461301 W79223 W74510 AI090689 AL600773 AL600781 N46003 R28075 R34182 BE071550 AW885857 AI276145 AI276696 H97808 N20540 AI468553
	424399 2196_1	NM_058173 AF414087 W72837 BF742809 AW070916 BE092421 AI905687 AA340069 BE074512 AI905623 AI905633 BG022312 W72838 AI139455 BG218084 BE926938 BE186013 AW176044 AW291950 BG185269 BG197185 BG192597 BG183176 BG207535 AI127172 BE815819 AI905624 R75793 BG202313 AI905837 BE815853
75	427239 20459_2	AL532360 BE794750 AA582905 AI015067 AW271034 BG271636 AW075177 AW071374 AI345565 AI307208 BE138953 BE049086 AI334881 AW075006 AW075181 AA464019 AW030273 AW075100 AW073433 AI080284 AI334909 AI802853 AI345036 AI348921 AI340734 AI307478 AI251289 AW302327 AW072520 AI312145 AW073656 AW072513 AW071289 AI307559 AA876186 T29587 AI307493 AI255068 AI252868 AI252839 AW074809 AI252926 AI252160 AI251662 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764 AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139260 AI054302 AI054060 AI054057 AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE041872 AI254494 AI271496 AI252427 BF187773 BF718645 AW074866 BE857822
80	400222 9287_3	NM_002082 L16862 BG828886 BE795217 BE904064 BE294526 BE297283 BE394617 BE935127 BE935106 F12351 BG823182 H16710
	410600 497855_1	BF347859 AW499616 AA191322 AW499617 AL601010 AW575742 AA729043 BE453447 AA086179 BE549623 AI335824 AW408712 BM149172

			417324	292720_1	BG775668 BG680336 AW991605 AA455904 AW265494 AW265432 BF911380 AA456370 BF911379 AA195677 BF914311 BF913866 BG775059
					BC951874 A1572169
			453613	10943_2	BG121705 BF514513 BE812196 AW173164 A1911266 A161253 AA906295 AA724987 AA927070 AW085313 BG106211 BG119864 W02997 H80902
5			411825	7891_1	T91294 H09335 H09332 Z40007 F10399 F02595 F03100 H38987 A1801190 H80903 AW130044 F10391 T80640 H24461 R46234 R51914
					AK000695 AK000489 BC001688 BG235988 AW006329 A1887644 A1207230 A1148213 A1304333 A1634653 AW662636 A1281247 AA946921 AA424487
					BE272330 A1830588 AA159183 AA977141 BG231801 AA631793 AA975194 BF817537 AA477798 B1906631 AW083424 AA625199 NM_017767
					AK000334 BF984048 AW815634 AL573992 AA430612 AA928390 AA464447 AW340827 AA424290 A1927759 BG961502 AW881353 B1765535
			400270	32329_1	AF067853 NM_000026 X65867 BC018881 S60710 BG686218 BG707897 B1767531 BE742167 BG747544 BG768400 BG323811 AU119991 BG763638
10					BG333097 BG761706 B1766890 B1457560 BG122629 BF972974 B1194549 BE909022 BG488681 AW328441 AW248366 BG718034 B1598504
					BE264146 AW248440 BE410942 BE256756 A1480227 A1758918 BE251966 A1684330 AW518872 AW264087 AA631137 A172831 A1990690 A192994
					AAA17231 AA455931 AA416541 A1652537 A1803674 AA631209 A1923786 AW205704 A1354260 A1198855 BF593386 AW821194 A1693442 AW797594
					BE893700 BF242879 BE251315 AA534659 AA494551 B1047923 BG949898 BF246869 B1085069 BM007035 AA665981 A1375483 BG221393 A1867580
					AA128025 AW612345 R12769 W92325 R40084 AA191625 D51044 AA599257 BE878335 AA121664 A1146566 B1026299 A1872596 AA788642
					AA128068 BF819623 A1277591 A435105 A1354905 AV747031
15			442591	58995_1	BC021240 BF430978 BG056212 AW874052 B1856040 A1572156 A1914600 A1002736 BM023413 H91902 A1563177 AL529967 BM023140 BE391587
					BG761312 BE277571 B1195388 BE389566 B191851 BE391930 BE391441
					BG003993 AW589921 AW892489 AW903666
			410103	366775_1	AK055109 BC019085 AA187684 BG656226 BM023227 A1932311 AW264381 AA398371 BM021483 A1432433 A1375777 A1129580 AW262782
			437179	12239_1	AA134107 BM023515 AA977504 A1859222 A1348454 R69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 AA771919 A1092259
20					A1028416 A1074114 BG656536 BE501677 AW193419 AA917040 W90430 A1342984 A1378957 AL036486 AW020068 B1491093 BF476021 R41226
					R69631 F04125 C02343 AA115589 R56480 A1000388 R54266 R31422
			451050	11847_4	BM453041 AA760783 BE218582 A1340046 AW166131 BF515854 A1630296 AA461307 A1090881 AW023059 AA155797 AA115486 A1597396
					BW899004 AW937420 AA137082 AAD13374 BG619478 BG401839
			438129	497522_1	BE904404 AA778647 BF431869 AW070999 BG170122 BG191943 BG999184 R42302
			439246	388_5	AK054564 AF086057 A1869310 BG393141 BE220500 A1479459 A1866575 A1361301 A1674602 BF001506 AW004996 A1446292 A1890883 A1608681
25					AW131794 A1356096 A133040 A1696166 AW081428 A1392809 AA985226 AW190187 BE896007 BG171443 AW516382 AA731186 N50847
					AA417728 F27148 A1003145 AL520675 AL577680 AL578955 AA316669 BF804796 AA768324 A1285396 BG745142 BG325246 BG475289 A1580501
					AA832445 AA832168 BF063242 AW251083 BF345614 BE871009 BG698638 BG978245 BG978247
			427289	1820_2	BC007350 BG766159 BG769338 BG761999 BG744385 BG770572 AW370610 AW370581 AA978353 AW327973 AW402425 A1893300 AA868504
30					AW512968 AA630644 A1751211 N26980 A1394506 AA747849 BF154926 BF477185 AA649647 R39135 A1750216 T33563 W36278 AW079375
					AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG764907 T50662 AAD25671 AW815715
					AV703420 H55047 AA485582 R56186 H90385 R55913 B1261497 B1018403 BF376945 T75578 BF933325 BF932853 BG502266 AW868934 AV683504
					B1018121 N41953 BF933343 BF932871 H08334 R14012 BF897622 T50816 BG698803 BF340083 Z20199
					AA971409
35			406827	0_0	BE896316 BG819393 AA187888 AW753122
			443086	25669_4	BC006097 X03066 NM_002120 M26040 AW469119 AW469127 A1299772 AW518149 A1144456 AW628070 A1629032 A1358810 A1880433 A1440472
			400261	23110_1	A1357070 A1865365 AW014799 A1767973 AW518041 AA909398 AW768606
					AW936678 AW936821 AW936683 AW936822 AW936781 AW936817 AW936811 AW936653 AW936823 AW936685 AW936815 AW936637 AW936812
			412315	1163860_1	AW936730 AW936762 AW936682 AW936732
40			454478	4273_16	AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538
			459345	919706_1	AW853325 AW503672
			400214	9255_1	A1859839 BE897640 BE907077 BC003059 BC017245 BC010733 BM423383 AL537826 A1580324 BG749884 BE910412 B1085225 BG830374
					BG765711 BE513420 BE513706 AW249005 BE378229 BE250756 BG389441 BF998736 H61321 BF869238 BG979991 H49658 AA353290 D64154
45					BM468130 AL549088 B1765497 AL556922 B1833272 BM009270 B1546248 BG750170 BG480128 AL561553 B1559389 BG762029 BG741197 B1561200
					B1259044 AL523216 BG333073 B1838073 BE790691 BF762878 BF972560 B1260209 B133058 B1090605 BC468883 B1588273 B1825088 BE622086
					B1758061 BG751116 BE905428 BG764482 AL522174 BG761428 B1836634 BG749048 BG774512 BE280653 BG480630 BG716728 B176635
					BG573991 BG389305 BF971754 BG680599 BE795075 BG324709 AA984290 BE304564 BG283813 BE252914 BF872431 BE467696 BE264894
					AL552517 BF872428 BF724779 BE279635 BF804329 BE764960 BF811388 D31335 AW953118 BF992435 BF811453 NM_007002 A1518634
					AL524934 AL523534 AL520445 AL521785 AL547001 AL558522 B1829145 B1862487 B1753281 BE258642 AL039594 BG0015181 BE925165 BF872433
50					A1904540 A1904495 AA776741 AA317533 BG476628 R13328 BG489456 BF102495 BF693420 A1526597 BG104181 BG740214 BE393189 A1896312
					H61596 AW051180 B1668762 AW938619 B1086222 AA053472 BE264345
			406851	0_0	AA609784 R97304
			448498	20078_4	BG167206 AA677283 AA677217 A1703389 A1051577 A1912137 H39571 AA650047 A1399798 H24807 AA341614 BG945259 A1074162 AW960920
					AA528934 AA659498 AA699617 H14450 H21758 H39576 AA095608 A1049973 BG054505 BG319545 A1742408 AA421324 A1580138 A1375883
55					A1374848 A1367657 A1374762 A1304678 AA007357 BF477168 A1373751 AA779885 A1801494 BE349021 A1220937 AW338397 AA253409 AA418327
					AA872682 A1572030 A1521517 A1572944 A1418670 A1266089 W72413 W76492 A1809207 A1915747 H22230 H21951 H08513 H25154
			416929	14596_3	BC017849 BC005892 N42983 BF691239 N42991 N29240 N40292 N33322 N33330 N20535
			419250	249447_1	BG755078 B1226909 N41827 AW404060 B1058921 H11253 AA461274 R05714 H00515 B1086965 A1032786 B1089613 B1171783 A1127382 A1660953
60					A1W296271 A1582209 AA460965 A1376115 A1016900 BG055846 A1023644 AA767046 AA815039 AW403510 A1868663 AA815462 AA236654 AW292253
					AW959582 AV725205 AW959578 AA300091 W24933 R05715 AW770185 H00465 N93714 H11254 T49555
			424292	892193_1	AW966308 AA339512 AA338432
			420223	191648_1	N27807 AA256634 BE276324
			428342	6712_1	AK056315 A1015524 AA724079 B1713619 A1377728 AW293682 A1928140 A1092404 A1085630 AA731340 BM469629 AW968804 AA425658 AA769094
65					BF446026 AW118719 A1332765 AW500888 AW576556 A1859571 AW499664 AW614573 AW629495 AW505314 W77404 A1356361 A1923640
					AW070509 A1521500 AL042095 AA609309 AA761319 A1381489 H45700 AA761333 AW265424 AA909524 AA635311 AA649040 A1392620 Z40708
					A1958564 AW263513 AA913892 A1693486 AW263502 A1806164 AW291137 B1061872 B1059498 AA134476 AW084888 AA036967 AW370823 T55263
					B1002756 AA489664 BF827261 W74741 BF963156
			407394	27110_2	AF005081 B193848
			428618	2668_1	BC017998 B1826643 BG715794 BG722697 B1460787 BG773459 H52859 A1652853 A1990773 AW665193 AW340601 AA913806 A1337099 BE045942
70					AW572790 AW515652 H15004 AA909115 B1465310 B1462024 B1561578 B1463075 BG722527 R86003 BG623286 H15003 B1562131 BG435272
			416143	40539_2	BG218868 AV705271 N34158 AL538368 BG186620 BG188697 BG181900 A1200440 BG033721 BF968528 BF792547 AW204668 AA922311 F02735
					AW342041 BG217293 BE619664 BE465887 AA745605 A1278924 A1278546 A1280994 AA809678 AA282134 T08599 AA732436 T05478 F04402
					AA252267 A1969523 N25559 A1760218 BG217318 BF893160
			419308	249928_1	N40321 AA236322 AA236215
			446152	2857941_1	A1292036 A1858456 A177390
75			449092	4406_1	AK056270 AV706896 A1692935 A1681140 AW162481 AW087114 AW157019 A1689796 AW251085 AW206911 BF438207 A134945 BE041668
					BF111425 U91641 NM_013305 BF968902 U55966 AU130750 BE174853 A1929731 AW161524 R43753 BE779688
80					TABLE 49C: Pkey: Unique number corresponding to an Eos probeset Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495. Strand: Indicates DNA strand from which exons were predicted.



Nt\_position: Indicates nucleotide positions of predicted exons.

	Pkey	Ref	Strand	Nt_position
5	402075	8117407	Plus	121907-122035,122804-122921,124019-12416
	405451	7622517	Minus	145949-146227
	401747	9789572	Minus	118596-118815,119119-119244,119609-11976
	401454	9185923	Minus	114659-114832
	405545	1054740	Plus	118677-118807,119091-119296,121626-12182
10	401780	7249190	Minus	28397-28617,28920-29045,29135-29296,2941
	403328	8469086	Minus	120428-120703
	405547	1054740	Plus	124361-124520,124914-125050
	403532	8076842	Minus	81750-81901
	400750	8119067	Plus	198991-199168,199316-199548
	405506	6466489	Plus	80014-80401,80593-81125
15	400533	6981826	Minus	277132-277595
	405779	7280331	Minus	33048-33856
	402994	2996643	Minus	4727-4969
	401781	7249190	Minus	83215-83435,83531-83656,83740-83901,8423
	401994	4153858	Minus	42904-43124,43211-43336,44607-44763,4519
20	403669	8569909	Plus	31237-31375,32405-32506
	401760	9929699	Plus	83126-83250,85320-85540,94719-95287
	401797	6730720	Plus	6973-7118
	401151	9438288	Plus	30848-31228
25	404872	9650523	Minus	18540-18718
	402876	9864669	Plus	5679-6027,7485-7584
	405204	7230116	Plus	126569-126754
	402294	2282012	Minus	2575-3000
	400991	8096825	Plus	159197-159320
	401284	9800819	Minus	101307-101421
30	402474	7547175	Minus	53526-53628,55755-55920,57530-57757
	403022	3132351	Plus	92097-92864
	402542	9801558	Minus	67076-67594
	403409	9438598	Plus	6860-7054,12573-12771
35	403506	7596863	Plus	105008-105650
	406016	8272661	Plus	41341-41940
	405268	4156151	Minus	24404-24521
	401106	8568931	Plus	122694-122893
	404186	4481839	Plus	829-1110
	403817	8962065	Plus	110297-111052
40	406422	9256411	Plus	163003-163311
	402160	8516165	Plus	166063-166354
	402622	9930984	Minus	129861-130099
	401558	7139678	Plus	103510-104090
	404960	7408010	Minus	146186-146377,147747-147943
45	401203	9743387	Minus	172961-173056,173868-173928
	402860	9588237	Minus	76423-76560
	401588	7230871	Plus	46412-46561
	404831	6624702	Minus	16833-17020,20007-20120,21605-21799,2333
50	405885	7677703	Minus	42574-42998

TABLE 50A: ABOUT 398 GENES UPREGULATED IN PRIMARY MELANOMAS OR MELANOMA METASTASES RELATIVE TO BENIGN NEVI

Table 50A lists about 398 genes upregulated in primary melanoma or melanoma metastases relative to benign nevi. Genes were selected from 59680 probesets on the Eos/Arraymatrix HU03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey:	Unique Eos probeset identifier number
ExAccn:	Exemplar Accession number, Genbank accession number
UnigenetID:	Unigene number
Unigene Title:	Unigene gene title
R1:	70th percentile of primary melanoma and melanoma metastasis AIs divided by the maximum AI of benign nevi.
R2:	70th percentile of primary melanoma and melanoma metastasis AIs divided by the maximum AI of benign nevi, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

	Pkey	ExAccn	UnigenetID	Unigene Title	R1	R2
65	422424	AI186431	Hs.296638	prostate differentiation factor	13.73	16.82
	446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	11.67	11.84
	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	9.35	7.59
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypotheti	8.63	7.90
70	417880	BE241595	Hs.82848	selectin L (lymphocyte adhesion molecule	8.21	4.09
	424321	V74048	Hs.1765	lymphocyte-specific protein tyrosine kin	7.13	6.10
	447210	AF035269	Hs.17752	phosphatidylinositol-specific phospholipas	6.79	6.26
	417693	AW959741	Hs.40368	adaptor-related protein complex 1, sigma	6.55	6.36
75	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotoxicin)	6.43	7.11
	414812	X72755	Hs.77367	monokine induced by gamma interferon	6.43	7.51
	451736	AW080356	Hs.23889	ESTs, Weakly similar to ALU7_HUMAN ALU S	6.31	4.28
	418870	AF147204	Hs.89414	chemokine (C-X-C motif), receptor 4 (fus	6.20	4.32
80	428291	AA534009	Hs.183487	interferon stimulated gene (20kD)	6.03	4.52
	417308	H60720	Hs.81892	KIAA0101 gene product	6.01	6.78
	448569	BE382657	Hs.21486	signal transducer and activator of trans	5.99	7.51
	439310	AF086120	Hs.102793	ESTs	5.95	4.79
	452838	U65011	Hs.30743	preferentially expressed antigen in meta	5.95	5.55
	422241	Y00062	Hs.170121	protein tyrosine phosphatase, receptor t	5.76	4.82
	442379	NM_004613	Hs.8265	transglutaminase 2 (C polypeptide, prote	5.76	2.19



5	409274	NM_003930	Hs.52644	SKAP55 homologue	5.65	4.63
	442739	NM_007274	Hs.8679	cytosolic acyl coenzyme A thioester hydr	5.58	3.41
	442711	AF151073	Hs.8645	hypothetical protein	5.45	5.79
	425118	AU076611	Hs.154672	methylene tetrahydrofolate dehydrogenase	5.42	5.56
	412918	BE563957		activated RNA polymerase II transcriptio	5.35	4.31
	428125	AA393071	Hs.182579	leucine aminopeptidase	5.33	4.83
	446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	5.33	5.13
	431183	NM_006855	Hs.250696	KDEL (Lys-Asp-Glu-Leu) endoplasmic retic	5.30	6.27
	414219	W20010	Hs.75823	ALL1-fused gene from chromosome 1q	5.16	5.13
10	426600	NM_003378	Hs.171014	VEGF nerve growth factor inducible	5.05	13.72
	415444	BE247295	Hs.78452	solute carrier family 20 (phosphate tran	5.03	4.93
	436701	AW959032		ESTs, Moderately similar to I78885 serin	5.03	3.42
	406648	AA563730	Hs.277477	major histocompatibility complex, class	4.99	3.36
	410850	AW362867	Hs.302738	Homo sapiens cDNA: FLJ21425 fs, clone C	4.98	5.30
15	418299	AA279530	Hs.83968	integrin, beta 2 (antigen CD18 (p95), ly	4.98	4.85
	432469	AL080084		CGF-100 protein	4.97	4.46
	404854			Target Exon	4.85	3.49
	415701	NM_003878	Hs.78619	gamma-glutamyl hydrolase (conjugase, fol	4.82	4.2
20	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kD)	4.81	5.26
	408958	T99607	Hs.49346	signal recognition particle 54kD	4.78	2.34
	453949	AU077146	Hs.36827	heat shock 105kD	4.78	5.18
	458079	AU96870	Hs.54277	DNA segment on chromosome X (unique) 992	4.77	4.13
	440245	AK001913	Hs.7100	hypothetical protein	4.74	3.32
25	412228	AW503785	Hs.73792	complement component (3d/Epstein Barr vi	4.74	1.55
	417834	BE172058	Hs.82689	tumor rejection antigen (gp96) 1	4.73	4.25
	451003	AF058696	Hs.25812	Nijmegen breakage syndrome 1 (nibrin)	4.67	4.69
	424571	BE379766		polymerase (RNA) II (DNA directed) polyp	4.62	3.02
	434203	BE262677	Hs.283558	hypothetical protein PRO1855	4.61	5.45
	452268	NM_003512	Hs.28777	H2A histone family, member L	4.60	2.88
30	421311	N71848	Hs.283609	hypothetical protein PRO2032	4.60	3.24
	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA sequence	4.60	4.34
	425706	AW406678	Hs.122559	hypothetical protein FLJ22570	4.59	3.58
	450293	N35754	Hs.171118	hypothetical protein FLJ00026	4.57	3.82
35	406836	AW514501	Hs.156110	immunoglobulin kappa constant	4.57	9.27
	413441	A1929374	Hs.75367	Src-like-adaptor	4.53	3.60
	431129	AL137751	Hs.263671	Homo sapiens mRNA; cDNA DKFZp434I0812 (f	4.48	4.89
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	4.47	3.72
	411060	NM_006074	Hs.318501	Homo sapiens mRNA full length insert cDN	4.47	3.96
40	417501	AL041219	Hs.82222	sema domain, immunoglobulin domain (Ig),	4.45	2.40
	437763	AA469369	Hs.5831	tissue inhibitor of metalloproteinase 1	4.43	4.27
	448883	BE614989	Hs.7503	hypothetical protein FLJ14153	4.42	3.91
	417274	N92036	Hs.81848	RAD21 (S. pombe) homolog	4.41	3.80
	419285	D31887	Hs.89868	KIAA0052 protein	4.40	3.20
45	418321	D63477	Hs.84087	KIAA0143 protein	4.38	2.79
	430154	AW583058	Hs.234726	serine (or cysteine) proteinase inhibito	4.37	3.86
	428450	NM_014791	Hs.184339	KIAA0175 gene product	4.36	4.65
	428297	AA236291	Hs.183583	serine (or cysteine) proteinase inhibito	4.36	3.42
	447232	AW499834	Hs.327	interleukin 10 receptor, alpha	4.36	3.31
50	409598	NM_014018	Hs.55097	mitochondrial ribosomal protein S28	4.35	3.10
	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	4.34	5.61
	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	4.33	3.31
	443991	NM_002250	Hs.10082	potassium intermediate/small conductance	4.33	3.57
	452322	BE566343	Hs.28988	glutaredoxin (thioltransferase)	4.32	2.20
55	420991	AW504814	Hs.287379	Homo sapiens mRNA for FLJ00111 protein,	4.32	3.60
	449722	BE280074	Hs.23960	cyclin B1	4.31	5.79
	408380	AF123050	Hs.44532	diubiquitin	4.30	3.62
	427127	AW802282	Hs.22265	pyruvate dehydrogenase phosphatase	4.28	4.18
	417933	X02308	Hs.82962	thymidylate synthetase	4.28	5.06
60	432828	AB042326	Hs.287402	chondroitin 4-sulfotransferase	4.25	4.15
	450306	AL080080	Hs.24766	thioredoxin domain-containing	4.24	3.15
	440266	AA088809	Hs.19525	hypothetical protein FLJ22794	4.23	3.65
	407951	W77762	Hs.79015	antigen identified by monoclonal antibod	4.22	4.21
	427337	Z46223	Hs.176663	Fc fragment of IgG, low affinity IIb, r	4.20	4.11
65	408989	AW361666	Hs.49500	KIAA0746 protein	4.20	4.26
	449626	AA774247	Hs.301637	zinc finger protein 258	4.19	2.65
	422846	BE513934	Hs.1583	neutrophil cytosolic factor 1 (47kD, c	4.18	6.80
	415726	T89844	Hs.78712	aminolevulinate, delta-, synthase 1	4.16	4.28
	444207	A1565004		cathepsin D (lysosomal aspartyl protease	4.16	1.89
70	416980	AA381133	Hs.80684	high-mobility group (nonhistone chromoso	4.14	3.32
	438718	AL040058	Hs.6375	uncharacterized hypothalamus protein HT0	4.14	3.02
	437802	AA755995	Hs.122910	ESTs	4.12	4.18
	446392	AF142419	Hs.15020	homolog of mouse quaking QK1 (KH domain	4.12	3.87
	409461	AA382169	Hs.54483	N-myc (and STAT) interactor	4.11	3.80
75	427247	AW504221	Hs.174103	integrin, alpha L (antigen CD11A (p180),	4.11	5.71
	414359	M62194	Hs.75929	cadherin 11, type 2, OB-cadherin (osteob	4.10	4.25
	450071	AA018283	Hs.24359	Homo sapiens cDNA FLJ111174 fs, clone PL	4.10	2.91
	452882	AW972990	Hs.196270	folate transporter/carrier	4.10	4.25
	414522	AW518944	Hs.76325	Immunoglobulin J chain	4.09	3.99
80	407756	AA116021	Hs.38260	ubiquitin specific protease 18	4.09	4.60
	405506			Target Exon	4.08	3.64
	444677	AL110212	Hs.301005	purine-rich element binding protein B	4.07	2.43
	417497	AW402482	Hs.82212	CDS3 antigen	4.07	6.55
	413715	AW851121	Hs.75497	Homo sapiens cDNA: FLJ22139 fs, clone H	4.06	3.27

5	421508	NM_004833	Hs.105115	absent in melanoma 2	4.05	4.39
	408688	A1634522	Hs.152925	KIAA1268 protein	4.05	3.32
	439453	BE264974	Hs.6566	thyroid hormone receptor interactor 13	4.04	3.53
	445701	AF055581	Hs.13131	lymphocyte adaptor protein	4.02	4.20
	451131	A1267585	Hs.268012	fatty-acid-Coenzyme A ligase, long-chain	4.01	3.96
	449291	BE176893	Hs.23440	KIAA1105 protein	4.01	2.34
	443071	AL080021	Hs.8986	complement component 1, q subcomponent	4.00	6.97
	417615	BE548641	Hs.82314	hypoxanthine phosphoribosyltransferase 1	3.99	4.27
10	408246	N55669	Hs.333823	mitochondrial ribosomal protein L13	3.98	3.66
	408819	AW163483	Hs.48320	double ring-finger protein, Dorfin	3.98	3.76
	424058	AL121516	Hs.138617	thyroid hormone receptor interactor 12	3.97	2.38
	418942	A1566004	Hs.141269	Homo sapiens cDNA: FLJ21550 fs, clone C	3.97	3.40
	424756	AW504657	Hs.152931	lamin B receptor	3.93	2.67
15	421958	AA357185	Hs.109918	ras homolog gene family, member H	3.89	2.39
	440692	AL031591	Hs.7370	phosphatidylinositol transfer protein, b	3.88	3.23
	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	3.88	4.24
	418255	AW135405	Hs.37251	ESTs	3.87	2.53
	444371	BE540274	Hs.239	forkhead box M1	3.86	4.29
20	450515	AW304226		biphenyl hydrolase-like (serine hydrolase	3.85	3.73
	416114	A1695549	Hs.183868	glucuronidase, beta	3.85	3.74
	440596	H13032	Hs.103378	hypothetical protein MGC11034	3.84	1.90
	417020	T78413		heterogeneous nuclear ribonucleoprotein	3.82	2.04
	448503	BE243146	Hs.21332	BTB (POZ) domain containing 1	3.81	3.07
25	446506	A1123118	Hs.15159	chemokine-like factor, alternatively spliced	3.81	3.69
	417059	AL037672	Hs.81071	extracellular matrix protein 1	3.80	6.01
	410668	BE379794	Hs.159651	hypothetical protein	3.80	5.22
	420107	AL043980	Hs.7886	pellino (Drosophila) homolog 1	3.79	3.93
	446071	N51527	Hs.13659	hypothetical protein DKFZp586F2423	3.79	2.74
30	419731	S47242	Hs.92909	SON DNA binding protein	3.77	1.85
	443710	A1928136	Hs.9691	Homo sapiens cDNA: FLJ23249 fs, clone C	3.77	4.98
	406837	R70292	Hs.156110	immunoglobulin kappa constant	3.77	7.42
	436481	AA379597	Hs.5199	HSPC150 protein similar to ubiquitin-con	3.76	3.55
	419381	AB023420	Hs.90093	heat shock 70kD protein 4	3.76	3.81
35	423979	AF229181	Hs.136644	CS box-containing WD protein	3.76	3.97
	402474			NM_004079:Homo sapiens cathepsin S (CTSS	3.76	4.01
	412828	AL133396	Hs.74621	prion protein (p27-30) (Creutzfeldt-Jakob	3.75	3.77
	454080	A1199711	Hs.576	fucosidase, alpha-L-1, tissue	3.74	6.15
40	408085	N25929	Hs.342849	ADP-ribosylation factor-like 5	3.74	2.92
	426096	D87436	Hs.166318	tipin 2	3.72	2.98
	417105	X60992	Hs.81226	CD6 antigen	3.72	2.78
	418322	AA284166	Hs.84113	cyclin-dependent kinase inhibitor 3 (CDK	3.72	3.37
	447735	AA775268	Hs.6127	Homo sapiens cDNA: FLJ23020 fs, clone L	3.70	4.09
	409264	NM_014937	Hs.52463	KIAA0966 protein	3.69	4.79
45	429170	NM_001394	Hs.2359	dual specificity phosphatase 4	3.69	2.94
	428398	A1218368	Hs.98558	ESTs	3.68	3.82
	423494	AW504365	Hs.24143	Wiskott-Aldrich syndrome protein interac	3.67	3.52
	413235	BE243445	Hs.75248	topoisomerase (DNA) II beta (180kD)	3.67	2.79
	423712	W46802	Hs.81988	disabled (Drosophila) homolog 2 (mitogen	3.66	3.42
50	409703	NM_006187	Hs.56009	Z-5'-oligoadenylate synthetase 3 (100 k	3.66	6.44
	447225	R62676	Hs.17820	Rho-associated, coiled-coil containing p	3.65	2.93
	414829	AA321568	Hs.77436	pleckstrin	3.65	2.30
	400219			Eos Control	3.64	2.76
	437239	AW503395	Hs.5541	ATPase, Ca transporting, ubiquitous	3.63	2.73
55	422445	N23114	Hs.1526	ATPase, Ca transporting, cardiac muscle,	3.62	3.60
	445971	AA807346	Hs.288581	Homo sapiens cDNA FLJ14296 fs, clone PL	3.62	3.62
	424460	BE275979	Hs.296014	polymerase (RNA) II (DNA directed) polyp	3.62	3.06
	427609	AK000436	Hs.179791	hypothetical protein FLJ20429	3.62	2.31
	400750			Target Exon	3.61	2.74
60	424541	AW392551	Hs.180559	ESTs, Weakly similar to A56194 thromboxa	3.61	2.25
	427051	BE178110	Hs.173374	Homo sapiens cDNA FLJ10500 fs, clone NT	3.60	4.20
	433867	AK000596	Hs.3618	hippocampin-like 1	3.59	4.19
	421986	AL137438	Hs.110454	SEC15 (S. cerevisiae)-like	3.59	1.58
	414841	H55601	Hs.77490	glutathione S-transferase theta 1	3.58	1.00
65	429693	BE254962	Hs.211612	SEC24 (S. cerevisiae) related gene famil	3.57	3.00
	425204	NM_002436	Hs.1861	membrane protein, palmitoylated 1 (55kD)	3.56	3.09
	441689	R78195	Hs.29692	Homo sapiens cDNA FLJ11436 fs, clone HE	3.56	3.26
	442043	BE567620	Hs.99210	ESTs	3.55	3.56
	406636	L12064		gb:Homo sapiens (clone WR4.12VL) anti-th	3.55	3.83
70	446341	AL040763	Hs.310735	ESTs, Moderately similar to ALU7_HUMAN A	3.54	3.52
	432485	N90866	Hs.276770	CDW52 antigen (CAMPATH-1 antigen)	3.54	4.66
	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	3.54	3.25
	412630	AA738437	Hs.26226	Homo sapiens cDNA: FLJ21286 fs, clone C	3.54	1.87
	432841	M93425	Hs.62	protein tyrosine phosphatase, non-recept	3.53	3.96
75	425177	AF127577	Hs.155017	nuclear receptor interacting protein 1	3.53	3.40
	426643	AA857131	Hs.171595	HIV TAT specific factor 1	3.51	2.21
	420137	AA308478	Hs.95327	CD3D antigen, delta polypeptide (TIT3 co	3.51	2.51
	429248	U96759	Hs.198307	von Hippel-Lindau binding protein 1	3.51	2.85
	452852	AK001972	Hs.30822	hypothetical protein FLJ11110	3.51	2.71
80	451791	Z78407	Hs.27023	vesicle transport-related protein	3.49	2.91
	418310	AA814100	Hs.86693	ESTs	3.49	1.45
	406868	AA505445	Hs.300597	immunoglobulin heavy constant gamma 3 (G	3.48	6.81
	400200			NM_002788:Homo sapiens proteasome (pros	3.48	2.51
	438746	A1885815	Hs.184727	Human melanoma-associated antigen p97 (m	3.47	6.94

5	441646	A8023169	Hs.7935	KIAA0952 protein	3.47	3.38
	427968	A1857607	Hs.181301	cathepsin S	3.45	2.71
	440201	AL359588	Hs.7041	hypothetical protein DKFZp762B226	3.45	3.45
	434608	AA805443	Hs.179909	hypothetical protein FLJ22995	3.44	3.68
	427527	A1809057	Hs.153261	immunoglobulin heavy constant mu	3.44	6.70
	413385	M34455	Hs.840	indoleamine-pyrole 2,3 dioxygenase	3.44	2.72
	435550	AJ224456	Hs.324507	H.sapiens polyA site DNA	3.43	2.76
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	3.43	3.64
10	423392	AA195037	Hs.169341	HTAP protein	3.43	2.29
	418460	M26315	Hs.85258	CD8 antigen, alpha polypeptide (p32)	3.43	2.78
	453915	AA588721	Hs.286218	ribosomal protein L44	3.41	3.06
	442485	BE092285	Hs.29724	hypothetical protein FLJ13187	3.41	4.23
	432606	NM_002104	Hs.3066	granzyme K (serine protease, granzyme 3)	3.40	3.93
	417410	AF063020	Hs.82110	PC4 and SFRS1 interacting protein 1	3.40	2.12
15	436810	AA353044	Hs.5321	ARP3 (actin-related protein 3, yeast) ho	3.40	4.70
	422545	X02761	Hs.287820	fibronectin 1	3.39	7.58
	409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromoso	3.36	4.12
	434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	3.34	5.05
	448410	AK000227	Hs.21126	hypothetical protein FLJ20220	3.33	4.31
20	416065	BE267931	Hs.78996	proliferating cell nuclear antigen	3.33	4.60
	42642	BE297635	Hs.3069	heat shock 70kD protein 98 (mortalin-2)	3.32	4.49
	425234	AW152225	Hs.165909	ESTs, Weakly similar to U8022 hypotheti	3.24	4.22
	443623	AA345519	Hs.9641	complement component 1, q subcomponent	3.23	12.31
	426490	NM_001621	Hs.170087	aryl hydrocarbon receptor	3.23	5.07
25	443958	BE241880	Hs.10029	cathepsin C	3.16	4.97
	412577	Z22968	Hs.74076	CD163 antigen	3.14	4.75
	414050	NM_004766	Hs.75724	coatamer protein complex, subunit beta 2	3.13	4.00
	421633	AF121860	Hs.106260	sorting nexin 10	3.12	4.45
30	413936	AF113676	Hs.297681	serine (or cysteine) proteinase inhibitor	3.11	4.00
	428797	AA496205	Hs.193700	Homo sapiens mRNA: cDNA DKFZp586I0324 (f	3.10	4.03
	430314	AA369601	Hs.239138	pre-B-cell colony-enhancing factor	3.06	4.49
	430413	AW842182	Hs.241392	small inducible cytokine A5 (RANTES)	3.04	4.98
	418526	BE019020	Hs.85838	solute carrier family 16 (monocarboxylic	3.03	4.49
	452139	AA099969	Hs.16331	Homo sapiens cDNA: FLJ21482 fis, clone C	3.01	4.75
35	439237	AW408158	Hs.318893	ESTs, Weakly similar to A47582 B-cell gr	2.95	5.55
	422684	BE561617	Hs.119192	H2A histone family, member Z	2.94	4.64
	406782	AA430373		gb:zw2011.s1 Soares ovary tumor NbHOT H	2.93	10.28
	438549	BE386801	Hs.21858	trinucleotide repeat containing 3	2.91	5.40
40	450455	AL117424	Hs.25035	chloride intracellular channel 4	2.90	4.86
	427528	AU077143	Hs.179565	minichromosome maintenance deficient (S.	2.89	4.04
	422530	AW972300	Hs.118110	bone marrow stromal cell antigen 2	2.87	9.61
	423605	AF047826	Hs.129887	cadherin 19, type 2	2.83	4.86
	410231	AA314163	Hs.61153	proteasome (prosome, macropain) 26S subu	2.82	5.02
45	419956	AL137939	Hs.40096	cadherin 19, type 2	2.80	4.30
	416511	NM_006762	Hs.79356	Lysosomal-associated multispanning membr	2.79	5.80
	429732	U20158	Hs.2488	lymphocyte cytosolic protein 2 (SH2 doma	2.78	4.21
	448517	AA082750	Hs.42194	hypothetical protein FLJ22649 similar to	2.78	4.23
	416784	AA334592	Hs.79914	tumican	2.78	4.40
50	427792	M63928	Hs.180841	tumor necrosis factor receptor superfamily	2.77	4.23
	412140	AA219691	Hs.73625	RAB5 interacting, kinesin-like (rabkines	2.77	4.17
	427080	AW068287	Hs.301175	ras-related C3 botulinum toxin substrate	2.76	4.43
	446272	BE268912	Hs.14601	hematopoietic cell-specific Lyn substrat	2.75	4.20
	437179	AA393508		serologically defined colon cancer antig	2.74	4.07
55	429402	AF116571	Hs.201671	SRY (sex determining region Y)-box 13	2.72	4.63
	421360	AA297012	Hs.103839	erythrocyte membrane protein band 4.1-f	2.71	4.93
	409202	AA236881	Hs.51043	hexosaminidase B (beta polypeptide)	2.68	4.15
	426124	AI268389	Hs.250697	phosphatidylinositol glycan, class F	2.68	4.00
	422672	X12784	Hs.119129	collagen, type IV, alpha 1	2.67	4.72
60	417389	BE260964	Hs.82045	midkine (neurite growth-promoting factor	2.65	7.77
	409415	AA579258	Hs.6083	Homo sapiens cDNA: FLJ21028 fis, clone C	2.65	4.47
	410341	AW499985	Hs.42915	ARP2 (actin-related protein 2, yeast) ho	2.64	5.61
	433027	AF191018	Hs.279923	putative nucleotide binding protein, est	2.63	4.34
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	2.62	4.95
65	409430	R21945	Hs.346735	splicing factor, arginine/serine-rich 5	2.60	6.00
	424779	AL046851	Hs.153053	CD37 antigen	2.60	4.27
	409354	N68188	Hs.159472	Homo sapiens cDNA: FLJ22224 fis, clone H	2.60	4.64
	427550	BE242818	Hs.311609	nuclear RNA helicase, DECD variant of DE	2.57	4.27
	426143	BE379836		proteasome (prosome, macropain) subunit,	2.56	4.20
70	421563	NM_006433	Hs.105806	granulysin	2.56	4.13
	425593	AA278921	Hs.1908	proteoglycan 1, secretory granule	2.55	5.46
	428169	AI928984	Hs.182793	golgi phosphoprotein 2	2.54	5.78
	429800	AA333375	Hs.223014	antizyme inhibitor	2.50	5.15
	407241	M34516		gb:Human omega light chain protein 14.1	2.50	4.98
75	421739	AB004550	Hs.107526	UDP-GalbetaGlcNAc beta 1,4-galactosylt	2.45	5.58
	412819	T25829	Hs.24048	FK506 binding protein precursor	2.45	7.20
	412025	AI827451	Hs.24143	Wiskott-Aldrich syndrome protein interac	2.44	4.11
	435523	T62849	Hs.11090	membrane-spanning 4-domains, subfamily A	2.44	4.67
	445350	AF052112	Hs.12540	lysophospholipase I	2.44	5.44
80	449296	AL137257	Hs.23458	Homo sapiens cDNA: FLJ23015 fis, clone L	2.41	4.31
	440065	W03476	Hs.266331	hypothetical protein MGCA595	2.41	4.25
	400223			Eos Control	2.39	5.68
	422658	AF231981	Hs.250175	homolog of yeast long chain polyunsatura	2.39	6.62
	431629	AU077025	Hs.265827	Interferon, alpha-inducible protein (clo	2.38	7.22

	414622	A1752666	Hs.76669	nicotinamide N-methyltransferase	2.38	5.21
	415149	X12451	Hs.78056	cathepsin L	2.37	7.71
	435099	AC004770	Hs.4756	flap structure-specific endonuclease 1	2.37	5.68
	427407	BE268649	Hs.177766	ADP-ribosyltransferase (NAD; poly (ADP-ribose) polymerase 2	2.31	4.89
5	426432	AF001801	Hs.169857	paraoxonase 2	2.29	4.83
	430555	A1815486	Hs.243901	Homo sapiens cDNA FLJ20738 fs, clone HE	2.27	5.03
	413869	NM_000878	Hs.75596	interleukin 2 receptor, beta	2.25	4.14
	412617	AK001364	Hs.808	heterogeneous nuclear ribonucleoprotein	2.21	4.31
10	447547	NM_007229	Hs.18842	protein kinase C and casein kinase subunit	2.19	4.62
	416232	AW502678	Hs.79090	exportin 1 (CRM1, yeast, homolog)	2.18	4.84
	420842	AI083668	Hs.50601	hypothetical protein MGC10986	2.14	4.22
	411358	R47479	Hs.94761	KIAA1691 protein	2.13	4.65
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cytokine)	2.13	4.03
	406687	M31126		matrix metalloproteinase 11 (stromelysin)	2.11	4.16
15	417331	AW411297	Hs.81972	SHC (Src homology 2 domain-containing) 1	2.11	4.25
	450344	AW994032	Hs.8768	hypothetical protein FLJ10849	2.11	4.09
	429642	X58264	Hs.211579	melanoma cell adhesion molecule (MCAM) (CD146)	2.11	5.42
	416448	L13210	Hs.79339	lectin, galactoside-binding, soluble, 3	2.10	6.42
	418613	AA744529	Hs.66575	mitogen-activated protein kinase kinase	2.10	4.00
20	453352	T10446		ESTs	2.09	4.48
	409220	BE243323	Hs.51233	tumor necrosis factor receptor superfamily member 1	2.09	4.98
	414045	NM_002951	Hs.75722	ribophorin II	2.07	4.59
	422451	AA310753	Hs.42491	ESTs, Weakly similar to S65657 alpha-1C-aldolase	2.07	4.09
25	414085	AA114016	Hs.75746	aldehyde dehydrogenase 1 family, member 1	2.06	5.06
	452363	AI582743	Hs.94953	Homo sapiens, Similar to complement component C3	2.04	11.17
	438393	AA351815	Hs.50740	Homo sapiens cDNA: FLJ22272 fs, clone H	2.03	4.36
	413313	NM_002047	Hs.283108	glycyl-tRNA synthetase	2.02	4.79
	412994	D32257	Hs.75113	general transcription factor IIA	2.00	4.67
30	424415	NM_001975	Hs.146580	enolase 2, (gamma, neuronal)	1.98	4.79
	421897	AW583693	Hs.109253	N-terminal acetyltransferase complex and	1.98	4.17
	442159	AW163390	Hs.278554	heterochromatin-like protein 1	1.95	7.53
	429451	BE409861	Hs.202833	heme oxygenase (decycling) 1	1.95	4.63
	416967	BE616731	Hs.80645	interferon regulatory factor 1	1.95	4.31
35	400203			Eos Control	1.94	5.03
	437317	AA748613	Hs.311977	ESTs, Highly similar to SWI/SNF related, modulator of	1.94	4.03
	414945	BE076358	Hs.77667	lymphocyte antigen 6 complex, locus E	1.93	4.68
	416224	NM_002902	Hs.79088	reticulocalbin 2, EF-hand calcium bindin	1.92	4.12
	445411	AL137255	Hs.12646	hypothetical protein FLJ22693	1.91	4.23
40	413945	NM_000591	Hs.75627	CD14 antigen	1.90	5.00
	413317	U53225	Hs.75283	sorting nexin 1	1.89	4.20
	448719	AA033627	Hs.21858	trinucleotide repeat containing 3	1.89	4.26
	430838	N46664	Hs.169395	hypothetical protein FLJ12015	1.88	4.15
	427239	BE270447		ubiquitin carrier protein	1.87	5.72
45	450440	AB024334	Hs.25001	tyrosine 3-monooxygenase/tryptophan 5-mo	1.87	5.81
	433671	AW138797	Hs.132906	19A24 protein	1.85	4.27
	413190	AA151802	Hs.40368	adaptor-related protein complex 1, sigma	1.85	5.19
	414915	NM_002462	Hs.76391	myxovirus (influenza) resistance 1, homo	1.85	4.31
	430040	AW503115	Hs.227823	p45 protein	1.83	5.57
50	417929	R27219	Hs.74647	Human T-cell receptor alpha-chain	1.82	4.29
	414570	Y00285	Hs.76473	insulin-like growth factor 2 receptor	1.81	4.39
	414416	AW409985	Hs.76084	hypothetical protein MGC2721	1.80	4.20
	428977	AK001404	Hs.194698	cyclin B2	1.79	4.17
	418707	U97502	Hs.87497	butyrophilin, subfamily 3, member A2	1.78	4.30
55	425367	BE271188	Hs.155975	protein tyrosine phosphatase, receptor type 1	1.78	5.44
	425811	AL039104	Hs.159657	karyopherin alpha 2 (RAG cohort 1, importin	1.77	5.11
	422009	AI742845	Hs.110713	DEK oncogene (DNA binding)	1.77	4.37
	424909	S78187	Hs.153752	cell division cycle 25B	1.74	5.00
	409154	U72882	Hs.50842	interferon-induced protein 35	1.74	4.86
60	413892	AB78921	Hs.75607	myristoylated alanine-rich protein kinase	1.73	4.37
	444954	AW247076	Hs.12163	eukaryotic translation initiation factor 4E	1.71	5.02
	424263	M77640	Hs.1757	L1 cell adhesion molecule (hydrophobin)	1.70	4.68
	424825	AF207069	Hs.153357	procollagen-lysine, 2-oxoglutarate 5-dio	1.70	4.59
	427378	BE515037	Hs.177556	melanoma antigen, family D, 1	1.67	5.59
65	413322	AA380158	Hs.75290	ADP-ribosylation factor 4	1.67	4.39
	442414	BE408758	Hs.8297	ribonuclease 6 precursor	1.65	4.03
	410129	BE244074	Hs.58831	regulator of Fas-induced apoptosis	1.64	4.24
	422976	AU076657	Hs.1600	chaperonin containing TCP1, subunit 5 (epsilon)	1.64	4.91
	443051	AA333660	Hs.71331	hypothetical protein MGC5350	1.64	4.08
70	452472	AW957300	Hs.294142	ESTs, Weakly similar to C55663 oligodendrocyte	1.63	4.41
	446143	BE245342	Hs.306079	sec61 homolog	1.62	4.70
	431142	AA852596	Hs.250641	tropomyosin 4	1.62	4.86
	407752	AA573581	Hs.13328	ESTs	1.62	4.19
	416322	BE019494	Hs.79217	pyruvate-5-carboxylate reductase 1	1.61	4.51
75	414572	AU077174	Hs.268181	cathepsin H	1.60	5.25
	415017	F06434	Hs.77805	ATPase, H transporting, lysosomal (vacuolar)	1.60	4.56
	452056	AW955065	Hs.101150	Homo sapiens, clone IMAGE:4054156, mRNA	1.58	5.46
	413976	BE295452	Hs.75655	procollagen-proline, 2-oxoglutarate 4-dio	1.58	4.05
	414420	AA043424	Hs.76095	immediate early response 3	1.58	4.00
80	419638	N46504	Hs.91747	profilin 2	1.57	5.57
	422624	BE616678	Hs.76152	KDEL (Lys-Asp-Glu-Leu) endoplasmic retic	1.57	4.44
	415819	AU077330		transcription elongation factor A (SII)	1.55	4.89
	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	1.55	6.66
	425243	N89487	Hs.155291	KIAA0005 gene product	1.54	4.38

5	424799	BE550723	Hs.153179	fatty acid binding protein 5 (psoriasis-	1.53	4.22
	416971	R34657	Hs.80658	uncoupling protein 2 (mitochondrial, pro	1.53	7.41
	426059	BE292842	Hs.166120	interferon regulatory factor 7	1.51	4.12
	416879	AW162087	Hs.5437	Tax1 (human T-cell leukemia virus type 1	1.50	4.02
	432999	BE294029	Hs.279903	Ras homolog enriched in brain 2	1.50	4.18
	415661	AF057307	Hs.78575	prosaposin (variant Gaucher disease and	1.49	4.19
	428098	AU077258	Hs.182429	protein disulfide isomerase-related prot	1.49	5.74
	452264	AU077013	Hs.28757	transmembrane 9 superfamily member 2	1.48	4.53
10	415198	AW009480	Hs.943	natural killer cell transcript 4	1.47	4.95
	411794	AL118577	Hs.75658	phosphorylase, glycogen; brain	1.45	4.61
	433271	BE621697	Hs.14317	nucleolar protein family A, member 3 (H/	1.45	4.15
	421416	BE302950	Hs.104125	adenylyl cyclase-associated protein	1.42	4.67
	415089	N25117	Hs.299465	ribosomal protein S26	1.41	5.19
15	421975	AW961017	Hs.6459	hypothetical protein FLJ11856	1.41	4.03
	400202			NM_002795: Homo sapiens proteasome (pros	1.41	4.44
	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	1.41	4.57
	412968	AW500508	Hs.75102	elanyl-tRNA synthetase	1.40	4.25
	440704	M69241	Hs.162	insulin-like growth factor binding prote	1.39	4.11
20	447099	AB030656	Hs.17377	coronin, actin-binding protein, 1C	1.39	4.51
	428511	AA019912	Hs.184693	transcription elongation factor B (SIII)	1.38	4.90
	413825	BE299181	Hs.75564	CD151 antigen	1.37	4.44
	441737	X79449	Hs.7957	adenosine deaminase, RNA-specific	1.36	4.29
	440087	W28969	Hs.7718	hypothetical protein FLJ22678	1.36	4.10
25	413566	AW604451	Hs.285814	sprouty (Drosophila) homolog 4	1.35	4.50
	413019	BE281604	Hs.75140	low density lipoprotein-related protein-	1.35	5.14
	433026	AW160616	Hs.279921	HSPC035 protein	1.35	4.14
	427380	NM_005534	Hs.177559	interferon gamma receptor 2 (interferon	1.34	4.35
	428289	M26301	Hs.2253	complement component 2	1.33	4.23
30	419715	AF070523	Hs.92384	vitamin A responsive; cytoskeleton relat	1.32	4.61
	425299	AW505214	Hs.155560	calnexin	1.31	4.76
	422242	AJ251760	Hs.273385	guanine nucleotide binding protein (G pr	1.30	5.30
	448483	AA356392	Hs.21321	Homo sapiens clone FLB9213 PRO2474 mRNA,	1.29	6.09
	407143	C14076	Hs.332329	EST	1.29	4.56
35	413125	BE244589	Hs.75207	glyoxalase I	1.26	5.56
	439053	BE244588	Hs.6456	chaperonin containing TCP1, subunit 2 (b	1.26	4.98
	413929	BE501689	Hs.75617	collagen, type IV, alpha 2	1.25	4.76
	419663	AA394208	Hs.92198	calcium-regulated heat-stable protein (2	1.24	4.56
	422166	W72424	Hs.112405	S100 calcium-binding protein A9 (calgran	1.21	8.96
40	416636	N32536	Hs.42645	solute carrier family 16 (monocarboxylic	1.21	4.02
	425335	BE394327	Hs.296267	folistatin-like 1	1.18	4.29
	446211	AJ021993	Hs.14331	S100 calcium-binding protein A13	1.17	4.32
	428642	NM_014899	Hs.10432	KIAA0878 protein	1.13	4.17
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	1.10	4.00
45	428216	M18468	Hs.183037	protein kinase, cAMP-dependent, regulato	1.09	4.40
	431211	M86849	Hs.323733	gap junction protein, beta 2, 26kD (conn	1.00	4.70
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	0.98	4.40
	408522	AIS41214	Hs.46320	Small proline-rich protein SPRK (human,	0.90	4.78

TABLE 508:

50	Pkey: CAT number: Accession:	Unique Eas probe/ identifier number Gene cluster number Genbank accession numbers	
55	Pkey 412918	CAT Number 2764_3	Accession BE784583 AL519009 AV755430 AV756363 AV711927 BI523434 AI521453 AA846815 AW024829 AW949702 BG218926 AA626658 AI445621 AI452815 AA946555 AA723580 AA612925 BG105326 BG532618 AW513994 AW602165 AI373448 AA907901 AW135104 BG186662 W69205 BG219754 BE774875 BG190378 AA483698 BE066066 BE066067 BE066062 AW304207 BE939361 AW795569 BG210592 AW795644 BE939358 AW102886 BE065977 BG182971 H97042 D58090 BI046351 H81248 AI750112 AW372079 C05492 D58287 D57835 AA935095 BF700910 BG215802 BG195459 AW368467 BG495535 BG533177 BI087962 BE541579 BF130753 Z69892 AA210833 BM353155 AI473754 AI147901 AI803109 AA843296 AA418925 AI478552 AI400067 AI360304 AA418828 AW301673 BE218952 AI632804 BF433234 AA394157 BF378047 BE467036 AA319724 AW290940 AI222671 AI347724 AW001711 AI028652 AA398130 AI470582 AI915936 AA906929 C75102 N36920 H50440 AI919034 AI004399 AI383862 AI123606 AA548518 AA516258 AI865321 N22865 AA484801 AI589792 AA758196 AA214630 AI373911 AW194733 AA213447 AI290291 BF437165 AA757592 BF086904 AW959032 AW992466 BF446888 AI936337 BE938849 AW149064 AI701629 N90021 BC016556 BC016365 NM_016040 AF151858 BI561037 AW966873 AW967497 BE219482 BE018650 AW770511 AW469095 AW470133 BM150181 BM193977 AI824135 AI632346 AI129838 BI47664 AI292112 BE244667 AA251084 AW503659 BM193866 BM194481 BF446862 AI597435 BF000262 AI824386 AI990100 AW087624 AA668793 AL080084 BI335866 BI820940 BG779242 BM069854 AA282620 AA256771 AW964511 AA451623 H00335 AW370399 AW954201 BM145846 BG111760 AI750065 BG655794 AA564086 BG494071 BM069606 AI675331 BE302224 AI476466 AI625980 BM144854 AI184602 AI343932 AW136586 AW029464 AI708651 AA824243 BM145917 AA662210 AA825708 AI335858 AI273704 AA662171 N48971 AA976514 AI344537 AA609603 AI873901 AI859995 AA833589 AA765811 AI150322 AI926816 BM148634 N98862 AA019347 AA897062 AA831100 N69889 BE243185 AA282179 AA831098 AA112676 AI702407 BG621752 BE006492 AA353202 BG674256 N46921 BI048774 AW300233 BF739890 AW966879 AA393405 BF115146 AA910651 AA013099 N28878 AA287713 BE348728 BG616445 AL599953 AL599952 BF381073 AW505056 AA094735 H03613 AA287714 H27168 RS4718 BF792697 AV693603 AV685883 BG619956 BF541504 BF216789 AA319751 BM452652 BF335838 AA280397 BG171509 BF571997 AA490239 AW388161 BE842126 BG165309 N71903 AI955397 AI536898 BE242040 F09718 AA772421 AA450218 M78543 BE241414 AA013098 H00297 AW576477 AW150918 AW591371 AI382711 N71926 H72497 AI285602 AA745055 AI281647 BF377670 T65207 BG532880 BG721680 AA285143 H27167 AW500235 BG494497 BF666899 BE379766 AW152643 AI803450 AI564343 AI092711 AI140525 AW152156 AI620740 AI554689 AI161209 AI290422 AI339745 AI374611 AI347388 AI858296 AI140529 AI366124 AA493912 AA406235 AA493889 AI057160 AW022264 AI097277 AI144126 AI080051 AA983529 AA860507 N53469 AA843767 N81163 H70628 AA424577 AA983537 BF003004 AA626688 AA235977 AI057152 AI095366 AI095356 AA458646 AW194479 AA150439 AI375272 AW571777 AI359198 AA993793 BE514394 BE738239 AA127883 AI034344 T59504 D81608 AA908704 AW051665 AA382785 AA307208 N24639 AI370715 BE244980 AA548596 AW449675 AI191008 BF223749 N70752 N22266 AI191012 AA028001 AI419106 BF215661 BF591548 BG942356 AI474968 BE858217 BF793358 AV756758 BG483603 AI093724 BF693395 BG545345 AI744294 T59549 AA811773 BG499757
60	436701	28142_1	
65	432469	58644_1	
70			
75			
80	424571	9758_1	

444207	9172_3	BE739425 AA514221 AA865491 AI828293 AA470456 AI276739 AA169357 BE932464 AA514889 AW819039 AW819083 BE843048 AI432496 AW470335 AI247243 BG533994 AA513783 AI887309 AA528035 AW972006 AW873028 AI924914 AI818810 AW152378 AW084946 AI521413 AI669583 BE932521 AI581370 BE180238 AW089750 AW771461 AW089714 AI590949 AI819148 AA731056 BF815234 BF911506 AA235803 AA485373 AI735658 AW393133 AW073080 AI707637 BF353320 BE843111 AW819036 AW393135 BG697291 AV648670 AV654332 AV687530 BG566964 AI807430 AI676072 AA837010 AI452482 AI625817 AW241750 BE048616 AI290928 AI680714 AA485530 BE175687 AV648513 AIW130312 AI000556 AA632893 BE674169 BF001208 AA948166 BE175650 AA524664 AA490345 AI244948 AA602956 AA483492 AA918178 AW802049 BG675859 AV658871 BG678060 AI565004 AW819026 BE843092 AV686437 AV723049 BG616948 AI911647 AI743490 AI091096 BE857251 AI962074 AA040027 AW769317 AA343477 AA640112 BF876213 R82948 H26425 H82876 BE843095 BE843140 BG536641 BG617830 AA235802 BE774985 BE006682 BF342375 AA903144 BF338083 BF984258 AV657996 AI749532 BE768614 BE857252 BE932516 BE768573 AV657993 AV657777 AV752631 BE774974 T55847 BF095761 BF911511 BE170793 BE180119 BG617338 H45942 T55897 AV657718 BG563497 BE299605 AI589870 AA847598 AI470122 BF939896 AI304356 BE223045 BF435800 AI394207 AI708171 AW025415 AI079409 AW008420 AW304226 N34543 AW603578 AA526951 AA836331 N99134 AA626645 R45023 AA902417 AW672925 AA449885 AA953982 AW675471 AA010062 N80194 H14620 H28475 H26247 BF333581 AW842369 H06848 H05608 H81745 H15016 R51905 AA850423 AI860904 AA876023 AK024824 BI089104 AL596792 AI880004 BF969921 BE349489 AA843097 AI475644 AW576123 AW731676 AI339951 AI128503 AW243903 BG231992 BG057353 AA987811 AA575927 AI889162 N68847 AA464693 AA982541 AA844323 AI969578 AI830997 AW731626 H77926 AI338984 R24078 AI128953 T88696 AA808038 AA694545 H02091 BF439007 AI189805 AI279912 AA730423 R26552 AA455017 AI264219 AI446015 R19187 F02331 T24484 AI522034 AV721528 BI056340 BG009879 AW371368 Z36733 BE707682 BG501334 BG180238 BE177547 H48381 BF055495 AI948528 AW994256 BF109394 AI817046 W58758 H48807 H01994 T78413 BG750345 R24132 N92060 R253..	
5			BC003552 L10284 NM_001746 AI271880 BI834281 BI597016 AI113331 BI668332 BI663073 BG720694 AL046729 BI640138 BI461052 AV647588 BG823268 AW898757 BE001258 AA312586 AA476446 AU089976 AA312196 BF749977 M94859 AF070646 BG564196 BG623597 AI117332 BG660963 BI667083 AU134542 AU138830 AI761759 BG679882 AA209406 AW512644 AW514813 AI570635 BE347592 BE655418 AI459204 BF725673 BE870032 BF001968 AL047245 BF724470 BF058818 H18415 BE076849 BE076857 BE076848 BE076827 BE076856 AV708687 AA380923 BE076851 F08118 L18887 BF795701 AU128383 BE908383 AW673350 AW500108 BE079837 BE929419 BF688758 AW503373 AW580528 BE005524 BI917505 BI457781 BE883812 BI668159 AA213643 AA374821 BF969974 BM480200 AU136152 BE396535 AV685066 AV693755 AL040984 AA676820 BG896408 BE082722 BE082312 C05287 BE082264 AA379850 AW672902 AI625955 BF033526 AW296557 AA728815 BE077058 AW081700 AA911707 AA362640 BE707179 BG913228 BG116191 BG752367 BA074678 AL036937 BG113760 H03524 BG681802 AI564688 AU149556 BE178600 AU134888 AI452433 AI208989 AA593932 AA580385 AA466274 AA629899 AA565929 AA114046 AA094252 BM450328 BG529968 R63320 BE076792 BE090073 BE076855 BE076859 BE076829 AA361719 AA379164 AI202712 BG223315 BE122741 BG534531 AA903494 H42978 BF074635 AW854212 BE739158 AA352904 C21593 BG697597 AA134969 AA374612 BE566182 BE871838 BE076911 AW579175 BF966390 BI548594 BG386452 BC913195 BM456787 H04286 T80096 N39642 H42119 BG483861 AW381621 R63347 AW128895 AI367416 AI095285 AA099344 BE586161 AA180109 BF246488 BI561938 AW579170 BG567212
10	13638_2		L12064 L12083 L12065 L12075 L12066 L12085 L12072 L12082 L12081 L12062 L12080
15	417020	74857_1	BC005265 BG176720 AW006027 BM352064 AW026316 AI635822 AI880584 AI693769 AI092211 BI492387 AI400449 AW166297 BF939910 AA232282 AW021432 AI333893 AA494308 AA854899 AI436795 AW069256 AA682373 AI092748 AA993184 AI126077 AI081758 AI240686 AI261863 AI378423 AA465237 AI376096 AA035579 AI087306 AA448162 AA129977 AI090903 AI080686 AI288939 N33004 AI081240 AW021546 AI370773 AI080604 AA669528 AI250053 AI870113 AA853181 AA858014 BG055562 BG939559 AW080765 AA032283 AW467587 H40506 D00762 NM_002788 AA641134 AI582295 AI417525 AI563975 AI093566 AI077443 AI290741 AW073417 BE875418 BM264076 BG876884 AI680535 AW854219 BE774635 AW854212 BG952443 AW854221 AW854208 BE156348 BE843056 AW858991 BE937569 BG878291 BG876450 AW819099 AI908570 AA449871 AU135228 BM478404 BF126296 AA375499 AA248473
20	400219	8366_1	AA430373 AA968771
25			AK055109 BC019085 AA187684 BG656226 BM023227 AI932311 AW264381 AA398371 BM021483 AI432433 AI375777 AI129580 AW262782 AU134107 BM023515 AA977504 AI859222 AI348454 B69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 AA771919 AI092259 AI028416 AI074114 BG656536 BE501677 AW193419 AA917040 W90430 AI342984 AI378957 AL036486 AW020068 BM491093 BF476021 R41226 R69631 F04125 C02343 AA115589 R56480 AI400988 R54266 R31422
30	406636	0_0	BC005265 BG176720 AW006027 BM352064 AW026316 AI635822 AI880584 AI693769 AI092211 BI492387 AI400449 AW166297 BF939910 AA232282 AW021432 AI333893 AA494308 AA854899 AI436795 AW069256 AA682373 AI092748 AA993184 AI126077 AI081758 AI240686 AI261863 AI378423 AA465237 AI376096 AA035579 AI087306 AA448162 AA129977 AI090903 AI080686 AI288939 N33004 AI081240 AW021546 AI370773 AI080604 AA669528 AI250053 AI870113 AA853181 AA858014 BG055562 BG939559 AW080765 AA032283 AW467587 H40506 D00762 NM_002788 AA641134 AI582295 AI417525 AI563975 AI093566 AI077443 AI290741 AW073417 BE875418 BM264076 BG876884 AI680535 AW854219 BE774635 AW854212 BG952443 AW854221 AW854208 BE156348 BE843056 AW858991 BE937569 BG878291 BG876450 AW819099 AI908570 AA449871 AU135228 BM478404 BF126296 AA375499 AA248473
35	400200	3806_1	AA430373 AA968771
40	406782	0_0	NM_005648 BC013809 L34587 BF103775 BG702618 BG716553 BI667090 BG505863 BF983483 BG718195 BI857891 BG501016 BM043599 AL521812 BG705730 BI495545 BM95546 BF112248 BM023182 BM023123 AI075173 AW051799 BF058224 BI242885 BF436008 BG622375 BM019558 BM023382 BG164174 N56909 BI467064 BM023464 AI207475 BM311415 BG758430 BG758807 AI934826 N90351 BG422026 BE910312 AI027778 AI081950 AI360890 BM009115 AI191829 BG759697 AI138728 AA399403 AI355589 AI336427 AA868702 AA393660 AA025127 BG027630 AA962774 AA631224 BG940967 BE791087 AA573315 W81685 AA393525 BG944103 AI339125 AI149864 AA977655 N90314 BE612839 BG491847 AI129091 AA461234 AA781198 AA759256 AA889594 AA975844 AI184099 AI018025 AA398363 AI003331 AI193380 AA626020 AI244476 AI601114 AW135664 AI026607 AW263599 AA813219 AI684453 AA878626 AA772222 AI085496 AI630226 BG940966 AI022010 AA770649 AA887624 AA491739 AA974295 BG530040 AA037091 AA019912 BI160457 H64512 BG503896
45	437179	12239_1	M31126 BC619646 AA367158 BI850421 AW988556 BF107010 BF969630 BF185964 AA361080 AW960026 AA147486 AI807023 AW770262 BI492178
50	426143	3806_1	BM145577 AA829932 AW021238 AW629477 AI337862 AI457141 BI712705 BM194542 BI712465 AI380070 N27407 AI609764 AI274152 AI206228 AI076874 AI261827 AI610982 AI469158 AI420690 AI168758 AA491675 C16249 C16232 C16209 C16275 C16274 C16243 R23287 BF246254 R66736 R23212 C14593
55			NM_002794 D26599 BM469989 BF305151 BG821966 BI089030 AW007738 BI222910 BM049422 BG028749 AI189162 AI831230 AW131497 BM272215 BE791105 AW778828 AA479594 AA480133 L131997 AA284572 AA453009 BF928258 AA152127 AA393918 BF765307 BE247542 BF934697 BF341798 BE253409 AA470620 AI828932 AW379902 AV762678 AV741784 AV760892 AI025755 AA878562 AA630630 AA761708 AA852518 AA855831 AA862947 N53065 AA131821 AA293499 N23342 N26856 AI147346 AW951549 AA772963 BE245986 BG208493 AI831666 BG474873 BI023168 AI419647 BG197069 BG191102 BF304178 BE536135 AA706900 AA443583 AI002710 AW776192 AI149842 BG214797 BG198193 AW197923 AW627799 T98663 BG194788 BG214656 BF345258 BG716363 AI066528 BI546220 AA393815 AA132004 AA353826 H97858 BG187823 BF841463 AI351714 AV735966 BG196439 BG216840 BG198438 BG400762
60	406687	0_0	AL532360 BE794750 AA582906 AI015067 AW721034 BG271636 AW075177 AW071374 AI345565 AI307208 BE138953 BE049086 AI334881 AW075006 AW075181 AA464019 AW302733 AW075100 AW073433 AI802854 AI334909 AI802853 AI345036 AI348921 AI340734 AI307478 AI251289 AW302327 AW072520 AI312145 AW073656 AW075128 AI071289 AI307559 AA876186 T29587 AI307493 AI255068 AI252868 AW074809 AI252926 AI252160 AI251662 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764 AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139260 AI054302 AI054060 AI054057 AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE041872 AI254494 AI271496 AI252427 BF718773 BF718645 AW074866 BE857822 BE739429 BM460292 AL549095 BF752457 BE783002 BG035869 AW601528 AI880413 BF593762 AA974415 AW305318 AA716501 AI936239 AI809486 AI744171 AW804992 BF108747 AW804693 BE219333 AI807707 AA306963 BG012140 BF741621 BF741618 BF741619 AW065243
65	400203	11774_1	AA155832 AU151381 AU158043 AU150410 AU145605 AU150252 AA188205 AU153035 AI147293 AA084507 AA868165 AI887120 AI468336 AW023112 H44035 F01513 AA747672 AW779630 AA575298 R77738 AU150931 R38473 AA189022 H95984 AL550490 AW949737 AU150194 AU149258 AI749453 AW172950 AW276160 AI753604 AI421762 AW575512 AI275633 AW516120 AI340167 AI567728 AI797326 AA471532 AI074080 AI533122 AW674646 AW316571 AA258187 AA102780 AA258186 AI363307 AA862862 AI206836 AA629555 AA486287 AI185097 AI872389 BE465687
70	427239	20459_2	
75			
80	415819	40015_1	

5 400202 11771\_2

10

AI246746 AI351453 AI189679 AA594582 AI038639 AA862764 AA644332 AA912423 AA601552 AW014502 AA694605 AW068949 BF941650  
 AW297886 BF941649 AI077854 AI027442 AA705602 AW020757 BI491734 AA977135 AA653973 BI522334 AA398723 AI260083 AI419671 AW009199  
 AA496011 AI144081 AI538440 BF741690 BF741680 HA1990 AV724108 AW955578 BE698790 T29312 BG954488 R33179 BI832621 BF742040  
 BE091493 H92122 BG614879 AW993709 AI216562 HA4107 AA393530 BE173154 BG285054 BF751883 AA489308 BF741676 R64496 BE183198  
 H97097 AW062534 BF036430 AW192614 BF431707 N30258 AA629072 BG954496 AI401616 BG960957  
 BE873890 BF745945 AA156007 AA573157 AW874610 AA916387 N75963 BI083306 AW044671 BC013008 NM\_002795 D26598 BG118716 BI910891  
 BF972860 BG119842 BI094093 AL538757 BE271653 BI856538 BE909573 BG105826 BE784430 BE899255 BI833973 BM010809 BE621321 BG684956  
 BE904726 BI871370 AV708990 BF971483 BE298241 BI197007 BE272092 BG120374 AW963509 BE540572 AV744947 BG943041 AW327463  
 BG472870 BE393697 N28533 AA316042 N42043 AW04246 AW892094 AA379896 AW801110 AW406977 AA379791 BG941889 BE076254 AA360459  
 AA379385 AA320056 BG942618 D31230 AA308300 AA360371 AA371733 AA732937 AA94241 W32225 BF745937 AI383690 BG202360

TABLE 50C:

Pkey: Unique number corresponding to an Eos probe set  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 NL\_position: Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
404854	7143420	Plus	14260-14537
405506	6466489	Plus	80014-80401,80593-81125
402474	7547175	Minus	53526-53628,55755-55920,57530-57757
400750	8119067	Plus	198991-199168,199316-199548

TABLE 51A: ABOUT 453 GENES UPREGULATED IN PRIMARY MELANOMAS RELATIVE TO NORMAL SKIN

Table 51A lists about 453 genes upregulated in primary melanomas relative to normal skin. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probe set obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probe set identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 R1: 90th percentile of primary melanoma AIs divided by 90th percentile of normal skin AIs  
 R2: 90th percentile of primary melanoma AIs divided by 90th percentile of normal skin AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

Pkey	ExAccn	UnigenelD	Unigene Title	R1	R2
452838	U65011	Hs.30743	preferentially expressed antigen in mela	14.06	15.56
430377	NM_001922	Hs.301865	dopachrome tautomerase (dopachrome delta	13.64	11.62
426555	NM_000372	Hs.2053	tyrosinase (oculocutaneous albinism IA)	13.50	7.98
438549	BE386801	Hs.21858	trinucleotide repeat containing 3	12.78	13.80
422424	AI186431	Hs.296638	prostate differentiation factor	11.88	15.56
426600	NM_003378	Hs.171014	VEGF nerve growth factor inducible	10.14	22.46
430822	AJ005371	Hs.248017	glyoxaldehyde-3-phosphate dehydrogenase	9.33	7.25
457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	8.66	9.62
438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	7.87	9.58
417355	D13168	Hs.82002	endothelin receptor type B	7.66	4.63
447210	AF035269	Hs.17752	phosphatidylserine-specific phospholipas	7.38	9.04
413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	6.64	7.32
415752	BE314524	Hs.78776	putative transmembrane protein	6.46	4.65
421508	NM_004833	Hs.105115	absent in melanoma 2	6.44	7.00
449644	AW960707	Hs.148324	ESTs	6.43	5.92
426312	AF026939	Hs.181874	interferon-induced protein with tetratri	6.27	6.47
446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	6.17	3.70
429500	X78565	Hs.269114	hexabrachion (tenascin C, cytotoxic)	6.09	3.92
414812	X72755	Hs.77367	monokine induced by gamma interferon	6.04	7.73
452973	H88409	Hs.40527	ESTs	6.04	5.89
402075			ENSP00000251056: Plasma membrane calcium	5.96	2.50
436856	AJ469355	Hs.127310	ESTs	5.72	5.29
425088	AA663372	Hs.169395	hypothetical protein FLJ12015	5.68	5.88
439310	AF086120	Hs.102793	ESTs	5.62	6.30
429170	NM_001394	Hs.2359	dual specificity phosphatase 4	5.62	3.30
413670	AB000115	Hs.75470	hypothetical protein, expressed in osteo	5.50	4.28
409512	AW979187	Hs.293591	melanoma differentiation associated prot	5.36	4.14
430540	AW245422		Homo sapiens cDNA: FLJ22105 fis, clone H	5.36	4.64
436315	BE390513	Hs.27935	hypothetical protein MGC4837	5.35	4.31
442426	AJ373062	Hs.332938	hypothetical protein MGC5370	5.28	4.03
435056	AW023337	Hs.5422	glycoprotein M6B	5.23	3.25
432828	AB042326	Hs.287402	chondroitin 4-sulfotransferase	5.20	5.52
430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	5.14	4.82
416339	AK000680	Hs.266175	phosphoprotein associated with GEMs	5.09	4.35
430838	N46664	Hs.169395	hypothetical protein FLJ12015	5.06	3.68
414004	AA737033	Hs.7155	ESTs, Moderately similar to 2115357A TYK	5.04	4.23
407366	AF026942	Hs.17518	gb:Homo sapiens cig33 mRNA, partial sequ	4.94	6.29
422192	AA305159	Hs.113019	fts485	4.88	5.62
420208	BE276055	Hs.95972	silver (mouse homolog) like	4.88	6.00
446006	NM_004403	Hs.13530	deafness, autosomal dominant 5	4.77	4.33
440065	W03476	Hs.266331	hypothetical protein MGC4595	4.74	9.85
421574	AJ000152	Hs.105924	defensin, beta 2	4.74	5.75
440274	R24595	Hs.7122	scrapie responsive protein 1	4.72	2.78
417166	AA431323	Hs.42146	ESTs	4.68	4.29
415314	N88802	Hs.5422	glycoprotein M6B	4.65	3.73
443983	H04482	Hs.163724	ESTs	4.64	3.06



5	432642	BE297635	Hs.3069	heat shock 70kD protein 98 (mortalin-2)	4.62	2.87
	437179	AA393508		serologically defined colon cancer anti	4.62	5.08
	417933	X02308	Hs.82962	thymidylate synthetase	4.58	3.02
	431620	AA126109	Hs.264981	2'-5'-oligoadenylate synthetase 2 (69-71	4.50	4.37
	431629	AU077025	Hs.265827	interferon, alpha-inducible protein (do	4.49	16.82
	447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	4.44	5.96
	409264	NM_014937	Hs.52463	KIAA0966 protein	4.42	2.94
	434203	BE262677	Hs.283558	hypothetical protein PRO1855	4.42	3.54
10	422309	U79745	Hs.114924	solute carrier family 16 (monocarboxylic	4.38	3.30
	449722	BE280074	Hs.23960	cyclin B1	4.32	4.07
	446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	4.30	3.82
	450065	AL050107	Hs.24341	transcriptional co-activator with PDZ-bi	4.28	4.36
	424247	X14008	Hs.234734	lysozyme (renal amyloidosis)	4.27	3.05
15	413916	N49813	Hs.75615	apolipoprotein C-II	4.25	4.68
	420267	N37030	Hs.173337	ESTs	4.24	4.24
	442739	NM_007274	Hs.8679	cytosolic acyl coenzyme A thioester hydr	4.21	3.00
	433576	BE080715	Hs.161091	ESTs	4.20	6.31
	412652	AJ801777		ESTs	4.20	2.73
20	438209	AL120659	Hs.6111	aryl-hydrocarbon receptor nuclear trans	4.20	5.18
	441553	AA281219	Hs.121296	ESTs	4.14	4.94
	407856	AA045281	Hs.266175	phosphoprotein associated with GEMs	4.14	3.14
	439926	AW014875	Hs.137007	ESTs	4.12	4.76
	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su	4.12	4.85
	400860			Target Exon	4.10	5.20
25	409415	AA579258	Hs.6083	Homo sapiens cDNA: FLJ21028 fs, clone C	4.08	6.02
	416636	N32536	Hs.42645	solute carrier family 16 (monocarboxylic	4.08	2.42
	452826	BE245286	Hs.301636	peroxisomal biogenesis factor 6	4.06	2.96
	407748	AL079409	Hs.38176	KIAA0606 protein: SCN Circadian Oscillat	4.06	2.28
30	417632	R20855	Hs.5422	glycoprotein M6B	4.01	2.96
	418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	4.00	4.62
	448111	AA053486	Hs.20315	interferon-induced protein with tetratin	4.00	2.82
	420674	NM_000055	Hs.1327	butyrylcholinesterase	4.00	2.90
	451668	Z43948	Hs.326444	cartilage acidic protein 1	3.99	5.17
35	430015	AW768399		ESTs	3.96	3.89
	407756	AA116021	Hs.38260	ubiquitin specific protease 18	3.94	2.91
	430223	NM_002514	Hs.235935	nephroblastoma overexpressed gene	3.93	3.89
	433364	AJ075407	Hs.296083	ESTs, Moderately similar to I54374 gene	3.93	4.70
	448719	AA033627	Hs.21858	trinucleotide repeat containing 3	3.92	7.78
40	419381	AB023420	Hs.90093	heat shock 70kD protein 4	3.87	3.34
	402609			KIAA1209 protein	3.87	3.69
	408083	BE383668	Hs.42484	hypothetical protein FLJ10618	3.86	4.04
	409703	NM_006187	Hs.56009	2'-5'-oligoadenylate synthetase 3 (100 k	3.85	3.64
	420218	AW580337		ribosomal protein L4	3.84	3.20
45	434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	3.84	5.19
	410600	AW575742		ESTs, Moderately similar to S55657 alpha	3.82	5.74
	442117	AW664964	Hs.128899	ESTs; hypothetical protein for IMAGE:447	3.82	2.96
	428513	BE220806	Hs.184697	Homo sapiens clone 23785 mRNA sequence	3.82	4.03
	417381	AF164142	Hs.82042	solute carrier family 23 (nucleobase tra	3.80	3.56
50	432094	AJ658580	Hs.61426	Homo sapiens mesenchymal stem cell prote	3.79	3.23
	443105	X96753	Hs.9004	chondroitin sulfate proteoglycan 4 (meta	3.77	3.66
	423605	AF047826	Hs.129887	cadherin 19, type 2	3.72	2.28
	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	3.72	5.34
	442578	AK001643	Hs.8395	hypothetical protein FLJ10781	3.71	3.42
55	448966	AW372914	Hs.86149	phosphoinositol 3-phosphate-binding prot	3.68	3.31
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	3.68	4.24
	400750			Target Exon	3.68	2.74
	447217	BE465754	Hs.17778	neuropilin 2	3.66	3.60
	459373	BE408266	Hs.301406	hypothetical protein PP3501	3.66	3.48
60	419628	H67546	Hs.49768	ESTs	3.62	4.13
	406868	AA505445	Hs.300697	immunoglobulin heavy constant gamma 3 (G	3.61	4.40
	421866	M24470	Hs.1435	guanosine monophosphate reductase	3.59	3.53
	421709	AA159394	Hs.107056	CE0-6 protein	3.57	2.63
	438501	Z44110	Hs.86149	phosphoinositol 3-phosphate-binding prot	3.56	3.54
65	408962	BE386436	Hs.44317	SRY (sex determining region Y)-box 10	3.55	2.70
	425139	AW630488	Hs.25338	protease, serine, 23	3.50	2.80
	428411	AW291464	Hs.10338	ESTs	3.49	2.58
	452744	AJ267652	Hs.246107	Homo sapiens mRNA; cDNA DKFZp434E082 (fr	3.48	4.61
	411305	BE241596	Hs.69547	myetin basic protein	3.48	3.37
70	447343	AA256641	Hs.236894	ESTs, Highly similar to S02392 alpha-2-m	3.47	2.68
	429854	AJ918130	Hs.21374	ESTs	3.47	2.63
	417621	AV654694	Hs.82316	interferon-induced, hepatitis C-associat	3.46	2.34
	435256	AF193766	Hs.13872	cytokine-like protein C17	3.46	2.47
	450534	AJ570189	Hs.25132	KIAA0470 gene product	3.42	3.65
75	421100	AW351839	Hs.124660	Homo sapiens cDNA: FLJ21763 fs, clone C	3.41	2.63
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	3.40	4.02
	442711	AF151073	Hs.8645	hypothetical protein	3.39	2.95
	453344	BE349075	Hs.44571	ESTs	3.38	2.38
80	436700	AJ693680	Hs.301406	hypothetical protein PP3501	3.36	4.60
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	3.36	2.61
	433867	AK000696	Hs.3618	hippocampin-like 1	3.36	4.26
	408393	AW015318	Hs.23165	ESTs	3.36	2.10
	447484	AA464839	Hs.292566	hypothetical protein FLJ14697	3.36	2.49
	412828	AL133396	Hs.74621	prior protein (p27-30) (Creutzfeld-Jakob	3.35	2.27



5	426158	NM_001982	Hs.199067	v-erb-b2 avian erythroblastic leukemia v	3.35	2.58
	440325	NM_003812	Hs.7164	a disintegrin and metalloproteinase doma	3.34	2.55
	420602	AF060877	Hs.99236	regulator of G-protein signalling 20	3.34	5.96
	439963	AW247529	Hs.6793	platelet-activating factor acetylhydrola	3.34	2.73
	406663	U24683		immunoglobulin heavy constant mu	3.31	5.21
	427540	R12014	Hs.20976	ESTs	3.30	3.40
	412141	A183838	Hs.48938	hypothetical protein FLJ21802	3.29	2.80
	400282			NM_005313:Homo sapiens glucose regulated	3.29	3.46
10	419870	AW403911	Hs.266175	phosphoprotein associated with GEMs	3.28	5.20
	416539	Y07909	Hs.79368	epithelial membrane protein 1	3.28	2.79
	431518	AA743462	Hs.165337	ESTs	3.27	2.51
	402994			NM_002463*:Homo sapiens myxovirus (infl	3.26	6.38
	419956	AL137939	Hs.40096	cadherin 19, type 2	3.26	4.48
	421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	3.26	3.71
15	444371	BE540274	Hs.239	forkhead box M1	3.25	3.72
	432874	W94322	Hs.279651	melanoma inhibitory activity	3.25	5.33
	417282	AA195203		RAB5C, member RAS oncogene family	3.24	3.20
	439569	AW602166	Hs.222399	CEGP1 protein	3.24	2.32
20	422530	AW972300	Hs.118110	bone marrow stromal cell antigen 2	3.24	6.20
	403817			NM_015271:Homo sapiens tripartite motif-	3.23	3.70
	407857	A1928445	Hs.92254	synaptotagmin-like 2	3.22	2.49
	426334	BE305081	Hs.169358	hypothetical protein	3.21	2.46
	453837	AL138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	3.19	5.50
25	427283	AL119796	Hs.174185	ectonucleotide pyrophosphatase/phosphodi	3.18	2.04
	437379	AL359575	Hs.23765	Homo sapiens mRNA; cDNA DKFZp547M123 (tr	3.18	3.73
	424090	X99699	Hs.139262	XIAP associated factor-1	3.18	4.44
	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA sequence	3.18	3.26
	408418	AW963897	Hs.44743	KIAA1435 protein	3.16	2.21
30	412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	3.16	4.04
	402829			C1002500:gi6754254[ref]NP_034610.1] hea	3.15	4.57
	437852	AW978107	Hs.5884	Homo sapiens mRNA; cDNA DKFZp586C0224 (f	3.15	3.07
	425935	Z96200	Hs.163724	HSPC019 protein	3.14	3.08
	417124	BE122762	Hs.25338	ESTs	3.14	2.73
35	425071	NM_013989	Hs.154424	deiodinase, iodothyronine, type II	3.11	2.16
	412490	AW803564	Hs.288850	Homo sapiens cDNA: FLJ22528 fis, clone H	3.10	2.43
	442271	AF000652	Hs.8180	syndecan binding protein (syntenin)	3.10	2.83
	415817	U88967	Hs.78867	protein tyrosine phosphatase, receptor-t	3.10	1.78
	429083	Y09397	Hs.227817	BCL2-related protein A1	3.10	3.17
40	437573	AW656565	Hs.153034	ESTs	3.10	3.32
	407813	AL120247	Hs.40109	KIAA0872 protein	3.10	3.90
	445745	AB007924	Hs.13245	KIAA0455 gene product	3.10	3.35
	451537	R56631	Hs.26550	retinoid X receptor, gamma	3.09	4.45
	408654	BE018882	Hs.46721	UCC1 protein	3.08	3.65
45	444484	AK002126	Hs.11260	hypothetical protein FLJ11264	3.08	2.12
	446019	A1362520		histone deacetylase 3	3.08	2.26
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	3.08	5.29
	427871	AW992405	Hs.59622	Homo sapiens, clone IMAGE:3507281, mRNA,	3.06	3.36
	403532			NM_024638:Homo sapiens hypothetical prot	3.06	3.37
50	433160	AW207002	Hs.134342	TASP for testis-specific adriamycin sens	3.04	3.17
	446341	AL040763	Hs.310735	ESTs, Moderately similar to ALU7_HUMAN A	3.03	2.98
	426501	AW043782	Hs.293616	ESTs	3.03	2.01
	450325	A1935962	Hs.91973	ESTs	3.02	2.19
	418941	AA452970	Hs.239527	E1B-55kDa-associated protein 5	3.02	3.29
55	431797	BE169641	Hs.270134	hypothetical protein FLJ20280	3.02	2.54
	442064	A1422867	Hs.88594	ESTs	3.00	1.96
	405451			dihydropyrimidinase-like 3	3.00	2.98
	414915	NM_002462	Hs.76391	myxovirus (influenza) resistance 1, homo	2.99	6.41
	454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	2.98	3.25
60	452958	AA883929	Hs.40527	ESTs	2.98	4.14
	427647	W19744	Hs.180059	Homo sapiens cDNA FLJ20653 fis, clone KA	2.96	3.30
	409190	AJ076536	Hs.50984	sarcoma amplified sequence	2.96	2.47
	428819	AL135623	Hs.193914	KIAA0575 gene product	2.96	4.16
	428450	NM_014791	Hs.184339	KIAA0175 gene product	2.96	2.41
65	414219	W20010	Hs.75823	ALL1-fused gene from chromosome 1q	2.95	2.79
	411358	R47479	Hs.94761	KIAA1691 protein	2.95	4.70
	432467	T03667	Hs.239388	Human DNA sequence from clone RP1-304B14	2.94	2.65
	400222			NM_002082*:Homo sapiens G protein-couple	2.94	2.69
	405785			NM_025184*:Homo sapiens hypothetical pro	2.94	2.55
70	409760	AA302840		gb:EST10534 Adipose tissue, white I Homo	2.94	2.57
	418113	AJ272141	Hs.83484	SRY (sex determining region Y)-box 4	2.93	2.52
	409038	T97490	Hs.50002	small inducible cytokine subfamily A (Cy	2.93	2.43
	456760	AW961251	Hs.127828	guanine nucleotide binding protein (G pr	2.92	3.20
	459710	AJ701596	Hs.121592	ESTs	2.91	4.45
75	411395	AA889673	Hs.7542	KIAA1802 protein	2.90	2.72
	427528	AJ077143	Hs.179565	minichromosome maintenance deficient (S.	2.90	2.27
	406964	M21305		FGFES predicted novel secreted protein	2.90	2.03
	428834	AW899713	Hs.339315	ESTs	2.89	3.55
	413190	AA151802	Hs.40368	adaptor-related protein complex 1, sigma	2.89	3.87
	438619	AB032773		TU1281-TY protein	2.88	2.37
80	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	2.87	2.00
	428782	X12830	Hs.193400	interleukin 6 receptor	2.86	2.51
	454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	2.86	3.07
	453107	NM_016113	Hs.279746	vanilloid receptor-like protein 1	2.86	5.58

5	414737	AI160386	Hs.125087	ESTs	2.84	2.79
	412140	AA219691	Hs.73625	RAB6 interacting, kinesin-like (rabkines	2.84	3.80
	447735	AA775268	Hs.6127	Homo sapiens cDNA: FLJ23020 fs, clone L	2.83	2.11
	416091	AF295370	Hs.283082	defensin, beta 3	2.83	3.32
	442445	AA082665	Hs.209561	KIAA1715 protein	2.81	2.17
	408208	BE018717		ESTs	2.81	2.43
	430066	AB296659	Hs.237825	signal recognition particle 72kD	2.80	2.25
	424755	AB033094	Hs.152925	KIAA1268 protein	2.80	2.74
10	422616	BE300330	Hs.118725	selenophosphate synthetase 2	2.79	2.01
	405506			Target Exon	2.78	2.65
	411619	AA186609	Hs.71040	hypothetical protein FLJ20425	2.78	3.10
	400236			Eos Control	2.78	2.21
	452698	NM_001295	Hs.301921	chemokine (C-C motif) receptor 1	2.78	3.15
	446488	AB037782	Hs.15119	KIAA1361 protein	2.78	2.80
15	439778	AL109729	Hs.99364	putative transmembrane protein	2.78	3.78
	420005	AW271106	Hs.133294	ESTs	2.78	2.85
	428642	NM_014899	Hs.10432	KIAA0878 protein	2.77	3.07
	453779	N35187	Hs.43388	28kD interferon responsive protein	2.76	4.56
	425289	AW139342	Hs.155530	interferon, gamma-inducible protein 16	2.76	1.83
20	437723	AI572731	Hs.13256	ESTs	2.76	4.23
	416730	T99937		gb:ye72d04.r1 Soares fetal liver spleen	2.76	2.98
	426153	AF057169	Hs.182771	vitellogenin macular dystrophy (Best disc	2.76	3.21
	444670	H58373	Hs.332938	hypothetical protein MGCS370	2.76	3.97
	421351	AU076667	Hs.103755	receptor-interacting serine-threonine ki	2.74	3.50
25	406673	M34996	Hs.198253	major histocompatibility complex, class	2.74	3.24
	427268	X78520	Hs.174139	chloride channel 3	2.74	2.82
	428403	AI393048	Hs.326159	leucine rich repeat (in FII) interactin	2.74	1.95
	409417	AA156247	Hs.104879	serine (or cysteine) proteinase inhibito	2.74	2.99
	419705	AW368634	Hs.154331	ESTs	2.74	2.28
30	404057	BE387593	Hs.21321	Homo sapiens clone FLB9213 PRO2474 mRNA,	2.72	3.60
	413599	AJ006239	Hs.75438	quinoid dihydropteridine reductase	2.72	2.43
	447164	AF026941	Hs.17518	virpin; similar to inflammatory respon	2.72	4.77
	430694	AK000790	Hs.246885	hypothetical protein FLJ20783	2.72	3.67
	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	2.71	12.06
35	424572	M19650	Hs.179600	2',3'-cyclic nucleotide 3' phosphodiaste	2.70	2.40
	409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromoso	2.70	3.81
	425996	W67330		hypothetical protein AL110115	2.69	3.85
	430441	BE398091		desmoplakin (DPI, DPK)	2.68	2.55
	442355	AA456539	Hs.8262	lysosomal-associated membrane protein 2	2.68	1.67
40	421362	AK000050	Hs.103853	hypothetical protein FLJ20043	2.68	2.94
	437158	AW090198		KIAA1150 protein	2.68	1.89
	412315	AW936678		gb:PM2-DT0023-080300-004-a04 DT0023 Homo	2.68	2.80
	432878	BE386490	Hs.279663	Pirin	2.68	2.58
45	408822	AW500715	Hs.57079	Homo sapiens cDNA FLJ13267 fs, clone OV	2.68	2.74
	426759	AI590401	Hs.21213	ESTs	2.68	2.35
	405486			Target Exon	2.67	2.70
	410326	AI368909	Hs.47650	ESTs	2.67	3.33
	434040	AW444613	Hs.288809	hypothetical protein FLJ20159	2.66	2.54
50	437396	BE140396	Hs.21621	hypothetical protein DKFZp7620076	2.66	1.91
	412719	AW016610	Hs.816	ESTs	2.66	4.21
	451708	AI306536	Hs.60975	ESTs	2.66	5.69
	418299	AA279530	Hs.83968	integrin, beta 2 (anigen CD18 (p95), ty	2.66	2.31
	425017	AL119305	Hs.26409	ESTs	2.66	2.73
	400235			NM_005336:Homo sapiens high density lip	2.66	2.29
55	444809	BE207568	Hs.208219	oculospanin	2.64	2.86
	436291	BE568452	Hs.344037	protein regulator of cytokinesis 1	2.64	2.33
	406382			C16001275:gl 12698037 dbj BA821837.1	2.64	2.48
	432241	AI937060	Hs.6298	KIAA1151 protein	2.63	3.16
	417308	H60720	Hs.81892	KIAA0101 gene product	2.63	2.10
60	429294	AA095971	Hs.198793	Homo sapiens cDNA: FLJ22463 fs, clone H	2.62	2.43
	453935	AI633770	Hs.42572	ESTs	2.62	1.99
	401454			NM_014226:Homo sapiens renal tumor anti	2.62	3.01
	436456	AW292677	Hs.248122	G protein-coupled receptor 24	2.62	5.94
65	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	2.61	3.02
	453256	AI565587	Hs.32556	KIAA0379 protein	2.60	2.68
	451622	AW139587	Hs.30579	Homo sapiens cDNA: FLJ23070 fs, clone L	2.60	2.51
	424006	AF054815	Hs.137548	CD84 antigen (leukocyte antigen)	2.60	2.56
	409354	N68188	Hs.159472	Homo sapiens cDNA: FLJ22224 fs, clone H	2.59	3.00
	425392	N39725	Hs.15220	zinc finger protein 106	2.58	3.52
70	427286	AW732802	Hs.2132	epidermal growth factor receptor pathway	2.58	1.86
	418166	AI754416		Cdc42 effector protein 3	2.58	2.15
	413794	AF234532	Hs.61638	myosin X	2.58	2.54
	445707	AI248720	Hs.114390	ESTs	2.58	1.95
	416640	BE262478	Hs.79404	neuron-specific protein	2.57	2.46
75	427982	NM_016156	Hs.181326	KIAA1073 protein	2.56	1.74
	439453	BE264974	Hs.6566	thyroid hormone receptor interactor 13	2.56	2.22
	455839	BE145814		gb:MRO-HT0208-101299-202-a04 HT0208 Homo	2.55	2.34
	447737	AK000643	Hs.19404	DKFZP564L0862 protein	2.55	2.31
	423799	AW026300	Hs.132906	19A24 protein	2.54	2.11
80	442762	AF035119	Hs.8700	deleted in liver cancer 1	2.54	2.47
	432886	BE159028	Hs.279704	chromatin accessibility complex 1	2.54	3.99
	440676	NM_004987	Hs.112378	UIM and senescent cell antigen-like doma	2.54	2.96
	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	2.53	6.98

	422340	AW296219	Hs.115325	RAB7, member RAS oncogene family-like 1	2.53	3.06
	428844	AW972635	Hs.301904	hypothetical protein FLJ112671	2.53	3.13
	458997	AW937420		ESTs	2.53	1.63
5	419591	AF090900	Hs.91393	Homo sapiens cDNA: FLJ21887 fs, clone H	2.52	2.30
	414807	AJ738616	Hs.77348	hydroxyprostaglandin dehydrogenase 15-(N	2.52	1.80
	429238	NM_002849	Hs.198288	protein tyrosine phosphatase, receptor I	2.52	3.02
	432882	NM_013257	Hs.279696	serum/glucocorticoid regulated kinase-6	2.52	3.05
	407260	L09095		gb: Homo sapiens mRNA fragment	2.50	5.00
	431186	NM_012249	Hs.250697	ras-like protein	2.49	6.16
10	417542	J04129	Hs.82269	progesterone-associated endometrial prote	2.49	4.71
	419556	U29615	Hs.91093	chitinase 1 (chitinobiosidase)	2.48	5.77
	408209	NM_004454	Hs.43697	ets variant gene 5 (ets-related molecule	2.48	3.77
	405885			Target Exon	2.46	3.11
	406837	R70292	Hs.156110	immunoglobulin kappa constant	2.44	3.10
15	412609	Z48804	Hs.74124	ocular albinism 1 (Nettleship-Falls)	2.44	4.90
	421633	AF121860	Hs.106260	sorting nexin 10	2.44	4.31
	415929	AA724373	Hs.49344	hypothetical protein FLJ11006	2.42	3.19
	413171	AA318325	Hs.75219	tyrosinase-related protein 1	2.37	3.11
	406621	X57809	Hs.8997	immunoglobulin lambda locus	2.36	5.87
20	414142	AW368397	Hs.334485	hemocytin (fibulin 6)	2.36	3.04
	410700	AA352335	Hs.65841	hypothetical protein FLJ20073	2.36	3.66
	414283	AW960011	Hs.154993	ESTs	2.34	4.95
	453931	AL121278	Hs.25144	ESTs	2.34	4.18
	422515	AW500470	Hs.117950	multifunctional polypeptide similar to S	2.32	3.45
25	435292	N20514	Hs.172865	ESTs	2.32	4.94
	412926	AJ879076	Hs.75061	macrophage myristoylated alanine-rich C	2.31	3.78
	440197	AW340708	Hs.317714	pallid (mouse) homolog, pallidin	2.30	3.95
	425262	D87119	Hs.155418	GS3955 protein	2.29	5.08
30	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	2.28	4.05
	403969			ENSP00000034663 Zinc finger protein 131	2.28	3.64
	421686	AB011156	Hs.106794	KIAA0584 protein	2.26	3.31
	432800	BE391046	Hs.278962	AIM-1 protein	2.24	4.08
	406782	AA430373		gb: zw2011.1.1 Soares ovary tumor NbHOT H	2.24	3.47
35	415539	AJ733881	Hs.72472	BMP-R1B	2.22	3.66
	447523	BE613328	Hs.21938	hypothetical protein FLJ12492	2.20	3.43
	433180	AB038651	Hs.31854	K562 cell-derived leucine zipper-like pr	2.20	3.52
	415825	Y18024	Hs.78877	inositol 1,4,5-bisphosphate 3-kinase B	2.19	3.76
	407241	M34516		gb: Human omega light chain protein 14.1	2.18	3.17
40	422243	AW803733	Hs.23585	hypothetical protein MGC12250	2.18	3.28
	417324	AW265494		ESTs	2.16	5.85
	412819	T25829	Hs.24048	FK506 binding protein precursor	2.14	3.49
	432342	AL036128	Hs.274404	plasminogen activator, tissue	2.13	4.39
	427923	AW274357	Hs.301406	hypothetical protein PP3501	2.13	5.48
45	417437	U52682	Hs.82132	interferon regulatory factor 4	2.13	3.08
	425535	AB007937	Hs.158287	KIAA0468 gene product	2.13	8.66
	429638	AJ916662	Hs.211577	kinecin 1 (kinesin receptor)	2.12	3.01
	409154	U72682	Hs.50842	interferon-induced protein 35	2.12	4.66
	429951	AL040521	Hs.15220	zinc finger protein 106	2.12	3.71
50	418918	X07871	Hs.89476	CD2 antigen (p50), sheep red blood cell	2.11	4.27
	419200	AW966405		EST	2.11	3.58
	416448	L13210	Hs.79339	lactin, galactoside-binding, soluble, 3	2.10	5.34
	425069	AA687465	Hs.298184	potassium voltage-gated channel, shaker-	2.07	7.86
	445133	AW157646	Hs.198689	ESTs	2.06	3.68
55	411492	T46848	Hs.70337	immunoglobulin superfamily, member 4	2.04	3.36
	408015	AW136771	Hs.244349	epidermal differentiation complex protei	2.03	3.41
	424412	H15512	Hs.10043	hypothetical protein FLJ13074	2.03	3.82
	431657	AJ345227	Hs.105448	ESTs, Weakly similar to B34087 hypothei	2.02	3.03
	427536	BE277141	Hs.115803	gb:601178666F1 NIH_MGC_20 Homo sapiens c	2.02	3.09
60	400533			ENSP00000209376-PRED65 protein (Fragmen	2.00	3.29
	432680	T47364	Hs.278613	interferon, alpha-inducible protein 27	1.99	3.07
	410129	BE244074	Hs.58831	regulator of Fas-induced apoptosis	1.97	4.52
	417312	AW688411	Hs.250811	leukemia-associated phosphoprotein p18 (	1.97	3.26
	423952	AW877787	Hs.136102	KIAA0853 protein	1.94	3.79
65	455705	AW161061		ESTs, Weakly similar to zinc finger prot	1.93	3.16
	419723	AL120193	Hs.339810	longevity assurance (LAG1, S. cerevisiae	1.93	3.11
	438866	U44385	Hs.325495	tissue inhibitor of metalloproteinase 2	1.93	3.47
	448410	AK000227	Hs.21126	hypothetical protein FLJ20220	1.92	3.00
	400292	AA250737	Hs.72472	BMP-R1B	1.92	4.07
70	436797	AA731491	Hs.334477	hypothetical protein MGC14879	1.90	3.04
	406851	AA609784		major histocompatibility complex, class	1.90	6.53
	428437	AV656017	Hs.184325	CGI-76 protein	1.89	3.39
	431836	AF178532	Hs.271411	beta-site APP-cleaving enzyme 2	1.89	4.04
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	1.87	3.64
	426322	J05068	Hs.2012	transcobalamin I (vitamin B12 binding pr	1.85	4.21
75	425221	AV649864	Hs.155188	TATA box binding protein (TBP)-associate	1.85	3.13
	420162	BE378432	Hs.95577	cyclin-dependent kinase 4	1.85	3.04
	443530	BE563088	Hs.9552	binder of Arl Two	1.85	3.20
	433671	AW138797	Hs.132906	19A24 protein	1.84	3.39
80	424415	NM_001975	Hs.146580	enolase 2, (gamma, neuronal)	1.82	3.22
	400991			Target Exon	1.82	4.11
	418677	S83308	Hs.87224	SRY (sex determining region Y)-box 5	1.82	3.43
	424441	X14850	Hs.147097	H2A histone family, member X	1.81	3.12
	424825	AF207069	Hs.153357	procollagen-lysine, 2-oxoglutarate 5-dio	1.79	5.31

5	425818	AB021225	Hs.159581	matrix metalloproteinase 17 (membrane-in	1.79	3.40
	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fis, clone PL	1.78	3.38
	414945	BE076358	Hs.77667	lymphocyte antigen 6 complex, locus E	1.77	3.69
	440942	AW246547	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	1.77	3.12
	401591			Target Exon	1.75	4.30
	425923	NM_005026	Hs.162808	phosphoinositide-3-kinase, catalytic, da	1.75	3.68
	412844	AI828045	Hs.18016	Homo sapiens mRNA; cDNA DKFZp586H0324 (f	1.74	3.53
	417237	H86385	Hs.81737	palmitoyl-protein thioesterase 2	1.73	3.06
10	419849	BE041436	Hs.93379	eukaryotic translation initiation factor	1.72	4.38
	454429	BE273437	Hs.301406	hypothetical protein PP3501	1.72	4.38
	440672	AF083811	Hs.7345	MAD1 (mitotic arrest deficient, yeast, h	1.72	3.61
	408204	AA454501	Hs.43666	protein tyrosine phosphatase type IVA, m	1.72	3.06
	430148	BE387620	Hs.234489	lactate dehydrogenase B	1.71	4.38
	426502	Y07759	Hs.170157	myosin VA (heavy polypeptide 12, myosin)	1.70	3.13
15	413317	U53225	Hs.75283	sorting nexin 1	1.70	3.08
	417333	AL157545	Hs.173179	bromodomain and PHD finger containing, 3	1.68	3.15
	407223	H96850		gb:yyw03b12.s1 Soares melanocyte 2NbHM Ho	1.68	4.19
	413566	AW604451	Hs.285814	sprouty (Drosophila) homolog 4	1.67	5.74
	404067			Target Exon	1.67	4.73
20	447630	AI660149	Hs.44865	lymphoid enhancer-binding factor 1	1.66	3.22
	443337	Y07604	Hs.9235	non-metastatic cells 4, protein expresse	1.65	3.17
	427747	AW411425	Hs.180655	serine/threonine kinase 12	1.64	3.35
	437912	BE278594	Hs.5912	F-box only protein 7	1.64	3.24
25	404140			NM_006510: Homo sapiens ret finger protei	1.64	3.10
	414214	D49958	Hs.75819	glycoprotein M6A	1.64	3.45
	427239	BE270447		ubiquitin carrier protein	1.62	3.58
	427289	AI097346		phosphoserine aminotransferase	1.62	5.89
	452923	BE276018	Hs.286940	five-span transmembrane protein M83	1.62	3.23
30	426020	AL110195	Hs.166017	microphthalmia-associated transcription	1.62	4.00
	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	1.61	5.00
	451489	NM_005503	Hs.26468	amyloid beta (A4) precursor protein-bind	1.60	3.06
	414699	AI815523	Hs.76530	synuclein, alpha (non A4 component of am	1.58	3.34
	411825	AK000334		hypothetical protein FLJ20327	1.56	3.18
	438552	AJ245820	Hs.6314	type I transmembrane receptor (seizure-r	1.56	3.23
35	428081	AA421048	Hs.95011	syntrophin, beta 1 (dystrophin-associate	1.55	3.10
	401914			Target Exon	1.54	3.33
	424902	NM_003866	Hs.153687	inositol polyphosphate-4-phosphatase, ty	1.54	3.15
	441648	H05734	Hs.30559	ESTs	1.52	3.36
40	439769	AA448828	Hs.30596	Homo sapiens mRNA full length insert cDN	1.52	3.17
	437696	Z83844	Hs.5790	hypothetical protein dJ37E16.5	1.52	4.93
	413019	BE281604	Hs.75140	low density lipoprotein-related protein-	1.52	3.01
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	1.52	3.83
	422596	AF063611	Hs.118633	2'-5'-oligoadenylate synthetase-like	1.50	3.04
45	421851	R18686	Hs.108896	lambda-crystallin	1.47	3.10
	448499	BE613280	Hs.77550	hypothetical protein MGC1780	1.44	3.07
	427378	BE515037	Hs.177556	melanoma antigen, family D, 1	1.44	3.00
	412641	M16660	Hs.74335	heat shock 90kD protein 1, beta	1.42	3.66
	448143	AF039704	Hs.20478	ceroid-lipofuscinosis, neuronal 2, late	1.42	4.16
50	413291	NM_006278	Hs.75268	sialyltransferase 4C (beta-galactosidase	1.41	3.30
	435968	AW161481	Hs.111577	integral membrane protein 3	1.41	3.30
	422486	BE514492	Hs.117487	gene near HD on 4p16.3 with homology to	1.40	3.01
	443759	BE390832	Hs.134729	FXRD domain-containing ion transport reg	1.39	3.82
	444441	AW613841	Hs.301394	hypothetical protein MGC3101	1.39	3.43
55	430205	AB025904	Hs.235168	carbonic anhydrase XIV	1.36	3.32
	406827	AA971409		gb:op92d04.s1 NCL CGAP_Lu5 Homo sapiens	1.35	3.03
	406906	Z25424		gb:H.sapiens protein-serine/threonine ki	1.34	6.25
	426890	AA393167	Hs.41294	ESTs	1.34	3.66
	433320	D60647	Hs.250879	ESTs, Highly similar to CTXN RAT CORTEXI	1.34	3.18
60	450358	AB010098	Hs.24907	coronin, actin-binding protein, 2B	1.33	3.19
	421612	AF161254	Hs.106196	BD6 antigen	1.33	3.03
	438915	AA280174	Hs.285681	Williams-Beuren syndrome chromosome regi	1.32	3.68
	428342	AI739158		Homo sapiens cDNA FLJ13458 fis, clone PL	1.32	3.10
	449444	AW818436		solute carrier family 16 (monocarboxylic	1.30	3.30
65	404700			Target Exon	1.30	3.14
	403043			Target Exon	1.30	4.22
	409858	NM_006586	Hs.56828	trinucleotide repeat containing 5	1.29	3.09
	424679	AL117477	Hs.119960	DKFZP727G051 protein	1.27	3.13
	406908	Z25437		gb:H.sapiens protein-tyrosine kinase gen	1.27	3.66
70	432665	AW603880		ATPase, H transporting, lysosomal (vacuo	1.26	3.09
	423130	AW897586	Hs.21213	ESTs	1.24	3.34
	453220	AB033089	Hs.32452	Homo sapiens mRNA for KIAA1263 protein,	1.24	3.15
	442680	BE270707	Hs.8583	similar to APOBEC1	1.22	3.94
	422319	AW403342	Hs.115232	splicing factor 3a, subunit 2, 65kD	1.21	3.36
75	402408			NM_030920: Homo sapiens hypothetical pro	1.04	3.37
	424905	NM_002497	Hs.153704	NIMA (never in mitosis gene a)-related k	1.00	3.02

TABLE 51B:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Pkey CAT Number Accession

430540	713_2	BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418 BM045810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM0309834 AW245847 A1770171 BF196861 BE856897 AA463876 A1375927 AA648810 AA948193 AA490916 A459893 A458188 A1240408 A191843 A1131029 AW768399 A1365196 AW337984 AW026150 BE466591 BE674599 A1818438 AA772197 A1651927 AW151143 B1198825 BG819083 BM458764 BE903567 BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610 BE561530 BE560537 BE903782 BE732947 B1227204 BG761305 BE262642 BE391848 BE382475 BG008258 B154791 B459099 BE391391 BE259420 BE298109 AW245422 A123847 A1914618 H00534 BE301004 AL531791 A1435581 BF793112 AL577303 A3373265 BE746965 BF743630 BE879296 A1359493 BM018598 A1689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 A121728 BG767231 BM462953 BG340524 W52648 AA113434 BE785431 B1041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 B1091658 N72512 W58732 W85690 BG958989 A1205206 H19721 W17051 W77958 B1262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 A931069 F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 A1027722 A150356 AA866395 AW977627 BE220225 AA884082 AW518114 A1243844 AA809493 AA481029 AA825718 A1347866 A431670 AA814436 A1251109 R07704 AA765606 AA724593 A1918399 A1537550 AA491103 AW008188 R07703 AA989120 AA746235 AW026983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612085 BE077936 B1860809 BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591
5		
10		
15	437179 12239_1	AK055109 BC019085 AA187684 BG656226 BM023227 A1932311 AW264381 AA398371 BM021483 A432433 A1375777 A1129580 AW262782 AA134107 BM023515 AA977504 A1859222 A1348454 B69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 AA771919 A1092259 AW028416 A1074114 BG656536 BE501677 AW193419 AA917040 W90430 A1342984 A1378957 AL036486 AW020058 AW020058 B1491093 BF476021 R41226 R69631 F04125 C02343 AA115589 R56480 A100988 R54266 R31422
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25	430015 713_2	BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418 BM045810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM0309834 AW245847 A1770171 BF196861 BE856897 AA463876 A1375927 AA648810 AA948193 AA490916 A459893 A458188 A1240408 A191843 A1131029 AW768399 A1365196 AW337984 AW026150 BE466591 BE674599 A1818438 AA772197 A1651927 AW151143 B1198825 BG819083 BM458764 BE903567 BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610 BE561530 BE560537 BE903782 BE732947 B1227204 BG761305 BE262642 BE391848 BE382475 BG008258 B154791 B459099 BE391391 BE259420 BE298109 AW245422 A123847 A1914618 H00534 BE301004 AL531791 A1435581 BF793112 AL577303 A3373265 BE746965 BF743630 BE879296 A1359493 BM018598 A1689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 A121728 BG767231 BM462953 BG340524 W52648 AA113434 BE785431 B1041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 B1091658 N72512 W58732 W85690 BG958989 A1205206 H19721 W17051 W77958 B1262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 A931069 F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 A1027722 A150356 AA866395 AW977627 BE220225 AA884082 AW518114 A1243844 AA809493 AA481029 AA825718 A1347866 A431670 AA814436 A1251109 R07704 AA765606 AA724593 A1918399 A1537550 AA491103 AW008188 R07703 AA989120 AA746235 AW026983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612085 BE077936 B1860809 BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591
30		
35	420218 191547_1	AW958037 R42557 A1337047 AA948360 A1638005 AA459950 A1624915 A1638047 A1467856 A1521826 AA860305 A1932315 AW003092 AW271756 AW779380 AA609879 A1634791 A1493770 A1565211 Z41145 A1627952 AA303734 BE349457 AW195765 AA256527 BE089727 BF347859 AW499616 AA191322 AW499617 AL010110 AW575742 AA729043 BE463447 AA086179 BE495623 A1335824 AW408712 BM149172 BC014433 Z49835 D16234 U42068 D83485 NM_005313 AL535156 AL533202 AL533596 AL531770 AL542767 AL551060 A1548510 AL542531 AL548618 BE799237 AL547374 AL560312 AL543505 AL540727 AL541255 BG765697 AU126498 B1829574 BG576125 AL519304 AL548821 AL542983 B1596431 B1829284 AL045490 BE407984 B1668702 B1713725 BE547233 BM312673 BG822625 AW239512 BM312685 BE296719 BM312059 B1712618 BM0309832 B1712859 BE513604 BM310042 B1712817 BG470156 AA305870 AW408391 BE298661 BG826781 BF726062 BM315135 BG472551 BF724589 AA353713 BF477104 B1838605 BG170854 BE612762 BF917301 BF332271 B1049186 BE715514 AW392181 BE768470 A912855 AW999145 BG739837 AA287804 AW801855 AL568814 AW384099 AW384058 AW754178 A1001019 R33917 BE814037 A1557164 AK025474 U11293 AF141304 BM424202 AL539879 A1554793 AL543707 AL549509 B1753328 BG756797 B1856494 BE901116 AL556889 AU133347 B1838505 AW949559 BM012604 BG773980 BG661309 B1260149 BF436764 BG983060 BF822225 B1059728 BF917866 BF917609 BF914374 D31003 AA234218 A1240466 BM083921 BE856788 BE669957 BF430992 AW614978 AW205958 BF110763 BF222758 A1195232 A1341353 A1698676 A1093230 A123522 A1656594 A1208758 AA975916 A1089224 A1264922 AA256604 AA659637 BE218707 AA195203 AW999239 A19139706 N13717 AW205941 R95955 N39147 BM015411 AL576975 BF689524 AL563130 B1858155 AA417889 AL513995 AL568815 AU106093 AA836028 H84388 AL517078 AL546480 AL530507 AL561042 AA024435 W47314 A1680513 AA456116 BF836679 AW975173 H24039 AW105059 BE548113 A1370257 BM011139 AW675130 BE276045 BF933396 AL517903 AA886367 B1030596 BG477193 BF973867 A1362520 D25917 A1670784 A1742347 AW269789 A1270700 AW610541 AW793036 AW793035 AW610540 AW362220 AW362166 AW362214 AW362225 AW362228 AL119827
40	410600 497855_1 400282 7778_2	NM_002082 L16862 BG828886 BE795217 BE904064 BE294526 BE297283 BE394617 BE935127 BE935106 F12351 BG823182 H16710 AA302840 T93016 T92950 AU184997 AA077551 NM_016575 AB032773 A1765521 BF593742 A1497757 A1761233 AW467938 BF000670 A1818496 N24761 AL043306 BF476138 BF593836 AA132787 A1147248 A1086795 AA151317 T95298 AW083548 AA058371 N27951 A1769860 A1784548 AW205506 A1800679 A1041733 A1459902 BE327641 A1858529 A1254736 A1302433 A1744176 A1241825 AA027842 AL524933 AL524932 BF947764 BF340737 BF948700 BG996395 N53455 N1027 A127616 N35901 AA682443 AA678249 AA719371 AA132582 T15981 H99958 N40717 AW959402 A1267251 BF909329 A142035 T95379 H29420 R59632 H17318 H17331 H29327 R40829 R43395 R59573 A1749661 R56599 H16755 A1694500 AA027907 B1757837 AW439843 AW172765 BE018717 BE464329 BE302285 H96902 BF477981 BE674508 BE670755 H95980 T15387 M80359 NM_002376 A132239 A120606 AU124963 A1065116 BE900808 BF968374 A1806648 BG774205 AW250728 BE265845 AA290719 AU125196 BG428863 AA333580 AA604551 W73300 A1932646 AA082201 AA627618 BF038887 BF337051 B1021159 AW057581 A1983156 A1628004 T71931 T90093 AW194009 H93969 A1742843 A1935080 BE041751 H93970 AW797399 W05032 T87824 T82912 AW129639 A1221821 A1911810 AA703093 AA160135 AW779124 AA102559 AA969646 D29560 B1915937 AA077116 B1085679 AA700887 AA081085 H80564 T99937 T7802 BM006551 AA367152 AW953705 A1631833 AW237429 AW027804 AA729038 BE503409 A521935 BF739953 AA702582 AA557633 AA780065 A1218139 AW194264 D20120 A1082715 A195980 BE857686 BE326711 AW953706 A1393749 A1383821 W67199 A1431759 A1795526 A1521794 A1796380 AW117545 A1749657 A1537634 N50122 BG108218 BE560548 AW380115 BE269629 A1911518 AW380113 AA902964 AA455001 A1276529 A1685597 AA970496 D61084 AW380068 AW380080 R00283 C15236 AW327776 D80759 AL050068 AA160485 AW173544 AW296506 AW439860 A1521563 A1075259 A1393606 A138323 A570109 H19504 BM021968 BF063327 BF593552 AA630766 A1597717 A1807128 AA523012 A1356250 AA451857 AA974203 A1762577 B5712552 AW007307 BE675286 AA450602 AA982057 AW516069 A1582546 BF221924 BF222543 A1801808 AW468599 AW000736 A1866625 AW235356 BM021837 AA911956 A1680606 W86516 T03370 AW611634 H41653 A1468349 H19588 AW090198 AW043993 R39847 A12315 1163860_1 AW936678 AW936621 AW936683 AW936682 AW936781 AW936817 AW936811 AW936653 AW936823 AW936685 AW936815 AW936637 AW936812 AW936730 AW936762 AW936682 AW936732 BC001179 NM_006336 M64098 BC014305 B1827845 B1918183 AU124191 AU125604 AU140930 AL043307 BG763670 BG824279 AU125959 B518466 BE271867 BM264138 BE148223 BM090633 BE273657 BG419930 BM048338 AU134368 BE163486 BE163483 BG421980 BG768130 AW500482 A1910107 AW868323 BF083170 AW450290 BM466817 BG255224 BE394282 AU140278 BE887464 AL042675 B1195986 BE883385 AA982057 BE270148 BM011334 A1093482 AA029803 A1010705 BE386809 F06628 AW408605 BF814085 BC007961 BM451548 BG768053 BM452948 AU140330 BG489566 B1870474 BM014013 AU131264 BG679824 B1225757 A1657400 BE410173 BM044254 BG763690 BE251495 BG719862 BE513489
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65	408208 642734_1 400236 231_3	
70	416730 1988296_1 425996 138046_1	
75	430441 1438_6 437158 59575_1	
80	412315 1163860_1 400235 3084_1	

5	18858_1	418166	18858_1	BM005937 A1064815 BF569858 B1712614 BG655891 BG424940 BE175180 BM313160 BG471936 BM091124 BF885884 BF870522 BE004490 BE712976 BE712852 AA401033 BF569477 BE712936 BF353839 BE713042 AA316561 BE712974 BE712977 BE712938 BE712937 BE712867 BE713043 BE713023 N42463 BE712901 BE713041 BE712904 BE712895 BE713012 BE713049 BE713025 BE712998 BE712988 BE712987 BE712986 BE712984 BE712982 BE712975 BE712970 BE712953 BE712929 BE712922 BE712875 BE712866 BE712861 BE712860 BE712854 BE712853 BE712902 BE712897 BE712912 BG984910 BE712903 BE784759 BE715723 BE715745 BE712915 AA441839 BE713040 BE715755 BF872528 BF060840 BG395104 BG744878 AU124081 A1889823 A1801072 A1633102 A1678670 A1493608 AW194294 A1354559 A1568736 AW152477 A1419496 A1720319 A1866190 AA047013 AA039625 BE049622 AA369065 AA025686 A1570198 AA706304 AA439251 H64553 AW168006 A193753 AW081999 AW082909 A1951490 BF886341 AW591246 A1190143 A1151074 A1499541 A1050934 AA402167 AA382049 T16207 T03299 A1932691 AW571663 BG479797 BE408436 B1460153 BG386046 BE616601 AW151629 BG236164 BF852743 BF852046 T57801 W37981 AA482668 H43740 W58142 W25087 BM459852 AU125403 BG767992 BE258516 A114509 BE394494 BE386905 AA450315 BG750593 AA557855 BG766487 BG766998 BF948864 BE279327 BE870900 AA577098 BF365851 AA745058 N29857 A1625038 AA641801 AA846174 H26395 AA025568 BF690282 BF67845 R72666 H39554 T78959 W01317 H45860 W80837 N53985 BG757202 BE838055 BE072895 BE072668 BE87012 BM042833 AA081591 BG745462 AW374086 BG831326 BE715757 BG767243 BG763722 AA113402 A1024044 BF818501 BE081938 BF353818 AA746336 BM019086 BE712894 H16977 H45012 R10793 BE708619 BF570432 AA593938 AA064637 T28082 AA852845 T78907 AA346590 F00017 BE966368 N58726 AA732431 T54379 W80749 BF238314 BE279768 AA325106 T19241 BE409939 BF852119 W23803 T54011 AW392638 B1465185 AW516784 AA211335 B1159846 AA064680 N80615 W49576 BF851406 R88120 AA434028 H44546 T61029 N44804 AA114948 H26960 B1261965 AA582599 BG469385 BF818172 BF923672 B1024270 AW362633 BE883122 BM470779 BE935760 AW856056 AW856103 BE828607 AW381799 AL121058 BE828618 BE769545 AA102142 BG749978 B1770417 B1862544 A1110687 AF063562 BE740347 BE874654 A1305113 BE513675 BE091369 B1046660 BE091453 B1046548 A1673786 BF868704 A1025179 BF356840 BF868357 BF868313 BG951884 A1347880 AW627563 BF932536 AW820377 BF739372 BF831620 BE068264 BE613627 AA841745 W01130 H28252 A1065915 BE867252 A1523348 AA763530 BF446858 Z43675 R19529 AL133837 BG389444 AW382942 BE702956 AA081951 BE835247 BE835308 BE835295 AA376302 BE645790 AA375690 AA376592 AW54423 N85732 AA249770 A1754416 AA213816 BF592044 AA811729 AW514842 A1633486 A1096810 AW183016 A1635738 N27524 BE645916 A1247842 AW991230 A1754277 H16814 A1766892 BF108422 A1000631 T95129 F11313 R97946 R93989 AA375242 BF109388 A1860939 A1680060 AW953899 BF971486 A1972337 AW953841 AA372437 A1216746 H11384 R34844 AA249043 AA249732 BE145823 BE145830 BE145884 BE145814 BE145905 BE145833 BE145834 BE145883 BE145889 BM453041 AA760783 BE218582 A1340046 AW166131 BF515854 A1630296 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A1307208 BE138953 BE049086 A1334881 AW075006 AW075181 AA464019 AW302733 AW075100 AW073433 A1802854 A1334909 A1802853 A1345036 A1348921 A1340734 A1307478 A1251289 AW302327 AW072520 A1312145 AW073656 AW072513 AW071289 A1307559 AA876186 T29587 A1307493 A1255068 A1252868 A1252839 AW074809 A1252926 A1252160 A1251662 A1251262 A1051093 A1270787 A1270156 A1252075 AW073469 AW072901 AW072496 AW071420 A1305762 A1254764 A1802837 A1251264 AW073049 AW071311 A1304063 BE138965 BE138502 AW073456 A1334733 A1054335 BE139260 A1054302 A1054060 A1054057 A1053722 A1289711 BE139228 AW470478 AW271039 AW302085 BE041872 A1254494 A1271496 A1252427 BF718773 BF718645 AW074866 BE857822 BC007350 BG766159 BG769338 BG761999 BG7744385 BG770572 AW370510 AW370581 AA978353 AW327973 AW402425 A1898380 AA868504 AW612968 AA630644 A1751211 N26980 A1394506 AA747849 BF154926 BF477185 AA649647 R39135 A1750216 T35363 W36278 AW079375 AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG764907 T50662 AA025671 AW815715 AV703420 H65047 AA485582 R56186 H90385 R55913 B1261497 B1018403 BF376945 T75578 BF933325 BF932853 BG502266 AW868934 AV683504 B1018121 N41953 BF933343 BF932871 H08334 R14012 BF897622 T50816 BG698803 BF340083 Z20199 AK000695 AK000489 BC001688 BG235988 AW006329 A1887644 A1207230 A1148213 A1304333 A1634653 AW662636 A1281247 AA496921 AA244487 BE272330 A1830688 AA159183 AA977141 BG231801 AA631793 AA975194 BF817537 AA477798 B1906631 AW083424 AA625199 NM_017767 AK000334 BF984048 AW815634 AL573932 AA430612 AA928390 AA644447 AW340827 AA424290 A1927759 BG951502 AW881353 B1765535 AA971409 AK056315 A1015524 AA724079 B1713619 A1377728 AW293682 A1928140 A1092404 A1085630 AA731340 BM469629 AW968804 AA425658 AA769094 BF446026 AW118719 A1332765 AW500888 AW576556 A1859571 AW499664 AW614573 AW629495 AW505314 W74704 A136361 A1923640 AW070509 A1521500 A1042095 AA609309 AA761319 A1381489 H45700 AA761333 AW265424 AA909524 AA635311 AA649040 A1992620 Z40708 A1985564 AW263513 AA913892 A1693486 AW263502 A1806164 AW291137 B1061872 B1059498 AA134476 AW084888 AA036957 AW370823 T55263 B1002756 AA489664 BF827261 W74741 BF963166 U9185 NM_004696 AV734324 A1245349 AA369517 H88760 D79128 AA970406 H01059 H88761 H03446 BG620383 A135008 A136895 A158158 A155762 R73608 R65751 R23756 N74630 AW078687 BE439761 BE786351 R68994 BE785867 AW297502 AW297553 BG431545 AW814843 BF382644 BG429339 BE929862 BF811258 BG165971 BE143233 AL577712 A1400326 AA769318 AA427866 AW088714 A1150755 A1924874 A1185243 AA804195 AA768972 AW574769 AW341643 AW204520 AA235326 A1005076 BE826687 AW004816 AW007235 BE826639 BE826634 BF222941 BE826631 BE826643 AA292639 AW514133 A1690331 A1673409 AA627727 A1923685 AA931499 A1249783 A1810663 AA548622 AA702095 AA832395 B1259508 AA262993 AW075840 AA810885
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TABLE 51C:

Pkey:

Ref:

Strand:

Nt\_position:

Unique number corresponding to an Eos probe set  
Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA  
sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
Indicates DNA strand from which exons were predicted.  
Indicates nucleotide positions of predicted exons.

Pkey

Ref

Strand

Nt\_position

402075

8117407

Plus

121907-122035, 122804-122921, 124019-12416

5	400860	9757499	Minus	151830-152104, 152649-152744
	402609	9926445	Minus	113464-113633, 114264-114654
	400750	8119067	Plus	198991-199168, 199316-199548
	402994	2996643	Minus	4727-4969
	403817	8962065	Plus	110297-111052
	402829	8918414	Plus	101532-101852, 102006-102263
	403532	8076842	Minus	81750-81901
	405451	7622517	Minus	145949-146227
10	405785	9581533	Minus	98702-98925
	405506	6466489	Plus	80014-80401, 80593-81125
	405486	6651379	Plus	179441-179598
	406382	9256148	Plus	122336-122851
	401454	9188923	Minus	114659-114832
	405885	7677703	Minus	42574-42998
15	403969	8569909	Plus	31237-31375, 32405-32506
	400533	6981826	Minus	277132-277595
	400991	8096825	Plus	159197-159320
	401591	9966977	Minus	55410-55835
20	404067	3282162	Plus	1415-2071
	404140	9843520	Plus	37761-38147
	401914	9369520	Plus	62537-62945, 63155-63308
	404700	9800123	Minus	159621-160203
	403043	7768753	Minus	314423-316252
25	402408	9796239	Minus	110326-110491

TABLE 52A: ABOUT 204 GENES UPREGULATED IN PRIMARY MELANOMAS RELATIVE TO MELANOMA METASTASES

Table 52A lists about 204 genes upregulated in primary melanomas relative to melanoma metastases. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigenelD: Unigene number

Unigene Title: Unigene gene title

R1: 90th percentile of primary melanoma AIs divided by the 90th percentile of melanoma metastasis AIs

R2: 90th percentile of primary melanoma AIs divided by the 90th percentile of melanoma metastasis AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

	Pkey	ExAccn	UnigenelD	Unigene Title	R1	R2
40	421948	L42583	Hs.334309	keratin 6A	21.90	16.66
	422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias)	21.36	43.65
	401781			Target Exon	18.70	18.58
	401780			NM_005557: Homo sapiens keratin 16 (foca	15.34	16.00
	431360	NM_000427	Hs.251680	loricin	12.34	9.86
45	409632	W74001	Hs.55279	serine (or cysteine) proteinase inhibit	11.24	8.73
	412636	NM_004415		desmoplakin (DPI, DPL)	11.20	6.62
	417366	BE185289	Hs.1076	small proline-rich protein 18 (comifin)	10.46	12.75
	409601	AF237621	Hs.80828	keratin 1 (epidermolytic hyperkeratosis)	10.41	25.49
	420859	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	9.20	8.63
50	420783	AI659838	Hs.99923	lectin, galactoside-binding, soluble, 7	8.11	11.14
	422511	AU076442	Hs.117938	collagen, type XVII, alpha 1	7.90	8.92
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	7.14	22.14
	427666	AI791495	Hs.180142	calmodulin-like skin protein (CLSP)	7.03	8.90
	430686	NM_001942	Hs.2633	desmoglein 1	6.88	5.39
55	431369	BE184455	Hs.251754	secretory leukocyte protease inhibitor (	6.60	12.79
	456525	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	6.44	6.19
	437191	NM_006846	Hs.331555	serine protease inhibitor, Kazal type, 5	6.34	7.77
	422166	W72424	Hs.112405	S100 calcium-binding protein A9 (calgran	6.15	8.91
	418067	AI127958	Hs.83393	cystatin E/M	6.08	9.24
60	408536	AW381532	Hs.135188	ESTs	6.04	17.40
	402075			ENSP00000251056: Plasma membrane calcium	5.96	8.41
	413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	5.46	3.32
	410001	AB041036	Hs.57771	kalikrein 11	5.38	5.36
	421100	AW351839	Hs.124660	Homo sapiens cDNA: FLJ21763 fs, clone C	5.32	3.84
65	407788	BE514982	Hs.38991	S100 calcium-binding protein A2	5.19	5.30
	419329	AY007220	Hs.288998	S100-type calcium binding protein A14	5.03	7.94
	429504	X99133	Hs.204238	lipocalin 2 (oncogene 24p3) (NGAL)	4.86	5.22
	421773	W69233	Hs.112457	ESTs	4.82	12.41
	442577	AA292998	Hs.163900	ESTs	4.82	4.40
70	401760			Target Exon	4.60	11.03
	408522	AI541214	Hs.46320	Small proline-rich protein SPRK (human,	4.50	11.35
	417515	L24203	Hs.82237	ataxia-telangiectasia group D-associated	4.47	12.43
	431211	MB6849	Hs.323733	gap junction protein, beta 2, 26kD (conn	4.45	2.99
	446989	AK001898	Hs.16740	hypothetical protein FLJ11036	4.39	4.23
75	423017	AW178761	Hs.227948	serine (or cysteine) proteinase inhibit	4.38	4.55
	418663	AK001100	Hs.41690	desmocollin 3	4.36	5.16
	424620	AA101043	Hs.151254	kalikrein 7 (chymotryptic, stratum com	4.29	5.19
	401747			Homo sapiens keratin 17 (KRT17)	4.28	5.41
80	414807	AI738616	Hs.77348	hydroxyprostaglandin dehydrogenase 15-(N	4.24	2.30
	411274	NM_002776	Hs.69423	kalikrein 10	4.22	4.82
	439496	BE616501	Hs.32343	Homo sapiens, Similar to RIKEN cDNA 1110	4.21	8.26
	420039	NM_004605	Hs.94581	sulfotransferase family, cytosolic, 2B,	4.18	4.73
	429538	BE182592	Hs.139322	small proline-rich protein 2A	4.16	7.30



5	418686	Z36830	Hs.87268	annexin A8	4.12	4.09
	407366	AF026942	Hs.17518	gb:Homo sapiens cig33 mRNA, partial sequ	4.08	2.13
	421733	AL119671	Hs.1420	fibroblast growth factor receptor 3 (ach	4.08	4.38
	416091	AF295370	Hs.283082	defensin, beta 3	4.05	5.38
	442757	AJ739528	Hs.28345	ESTs	3.94	4.28
10	427318	AF186081	Hs.175783	zinc transporter	3.92	3.07
	453309	AJ791809	Hs.32949	defensin, beta 1	3.90	4.30
	422192	AA305159	Hs.113019	fts485	3.88	2.81
	424012	AW368377	Hs.137569	tumor protein 63 kDa with strong homolog	3.86	5.03
	429365	AA451798	Hs.99249	ESTs	3.76	4.05
15	423634	AW959908	Hs.16590	heparin-binding growth factor binding pr	3.72	6.35
	425580	L11144	Hs.1907	galanin	3.68	3.65
	448966	AW372914	Hs.86149	phosphoinositol 3-phosphate-binding prot	3.68	2.75
	444946	AW139205	Hs.156457	hypothetical protein FLJ22408	3.59	5.72
	408591	AF015224	Hs.46452	mammaglobin 1	3.58	4.73
20	431009	BE149762	Hs.48956	gap junction protein, beta 6 (connexin 3	3.58	2.62
	438501	Z44110	Hs.86149	phosphoinositol 3-phosphate-binding prot	3.56	2.61
	421574	AJ000152	Hs.105924	defensin, beta 2	3.56	4.04
	402294			Target Exon	3.48	4.38
	428666	AL080190	Hs.189242	Homo sapiens mRNA; cDNA DKFZp434A202 (fr	3.44	2.95
25	401785			NM_002275:-Homo sapiens keratin 15 (KRT1	3.42	4.92
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	3.36	4.24
	418394	AF132818	Hs.84728	Kruppel-like factor 5 (intestinal)	3.31	5.42
	452392	L20815	Hs.507	comedodesmosin	3.30	8.56
	445183	AB007877	Hs.12385	KIAA0417 gene product	3.30	2.35
30	433124	U51712	Hs.13775	hypothetical protein SHAP31	3.26	2.15
	419098	AA234041	Hs.87271	ESTs	3.25	4.34
	421978	AJ243662	Hs.110196	NICE-1 protein	3.17	5.86
	445493	AJ915771		metallothionein 1E (functional)	3.16	2.98
	448111	AA053486	Hs.20315	interferon-induced protein with tetrati	3.14	2.07
35	445745	AB007924	Hs.13245	KIAA0455 gene product	3.10	2.39
	410268	AA316181	Hs.61635	six transmembrane epithelial antigen of	3.06	2.71
	407839	AA045144	Hs.161566	ESTs	3.06	3.54
	432374	W68815	Hs.301885	Homo sapiens cDNA FLJ11346 fs, clone PL	3.04	4.64
	439706	AW872527	Hs.59761	ESTs, Weakly similar to DAPI_HUMAN DEATH	3.04	2.78
40	452240	AJ591147	Hs.61232	ESTs	3.00	4.79
	409190	AU076536	Hs.50584	sarcoma amplified sequence	2.96	3.05
	408015	AW136771	Hs.244349	epidermal differentiation complex protei	2.94	10.53
	420798	W93774	Hs.99936	keratin 10 (epidermolytic hyperkeratosis	2.91	3.01
	406964	M21305		FGENES predicted novel secreted protein	2.90	5.34
45	451541	BE279383	Hs.26557	plakophilin 3	2.89	6.64
	454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	2.86	2.81
	414737	AJ160386	Hs.125087	ESTs	2.84	1.76
	428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	2.82	1.83
	405542			Target Exon	2.80	2.77
50	442503	AF147078	Hs.150853	p53-responsive gene 5	2.78	5.17
	402970			C20000886:-g 9280563 gb AAFB6472.1  (AF	2.78	3.37
	416730	T99937		gb:ye72d04.r1 Soares fetal liver spleen	2.76	2.76
	433435	BE545277	Hs.340959	Ts translation elongation factor, mitoch	2.75	2.76
	447164	AF026941	Hs.17518	viprin; similar to inflammatory respon	2.72	2.86
55	409453	AJ885516	Hs.95612	ESTs	2.70	6.68
	428824	W23624	Hs.173059	ESTs	2.67	2.75
	437233	D81448	Hs.339352	Homo sapiens brother of CDO (BOC) mRNA,	2.65	3.07
	430630	AW269920	Hs.2621	cystatin A (stefin A)	2.63	2.38
	433339	AF019226	Hs.8036	glioblastoma overexpressed	2.61	2.44
60	444670	H58373	Hs.332938	hypothetical protein MGCS370	2.57	1.74
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	2.54	3.66
	400995			C11000295:-g 12737279 ref XP_012163.1	2.54	2.93
	423515	AA327017	Hs.176594	ESTs	2.53	7.36
	417359	T99264	Hs.191117	ESTs	2.53	2.54
65	432426	AW973152	Hs.31050	ESTs	2.52	2.15
	413822	R08950	Hs.272044	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.52	3.05
	414987	AA524394	Hs.294022	hypothetical protein FLJ14950	2.52	3.85
	407748	AL079409	Hs.38176	KIAA0606 protein; SCN Circadian Oscillat	2.48	1.76
	426980	AL044315	Hs.173094	Homo sapiens mRNA for KIAA1750 protein,	2.47	1.92
70	413392	AW021404	Hs.13021	ESTs	2.47	2.56
	442762	AF035119	Hs.8700	deleted in liver cancer 1	2.46	1.90
	444781	NM_014400	Hs.11950	GPI-anchored metastasis-associated prote	2.46	7.90
	424364	AW383226	Hs.163834	ESTs, Weakly similar to G01763 atrophin-	2.46	2.66
	420568	F09247	Hs.247735	protocadherin alpha 10	2.46	3.01
75	405885			Target Exon	2.46	2.82
	412633	AF001691	Hs.74304	periplakin	2.46	5.01
	429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	2.45	3.35
	429624	AA458648	Hs.99476	ESTs, Weakly similar to 13131848 alpha1	2.44	2.33
	407325	AA291180	Hs.328476	ESTs, Weakly similar to alternatively sp	2.44	2.11
80	431441	U81961	Hs.2794	sodium channel, nonvoltage-gated 1 alpha	2.43	3.66
	432543	AA552690	Hs.152423	Homo sapiens cDNA: FLJ21274 fs, clone C	2.42	3.12
	430168	AW968343	Hs.145582	DKFZP434I1735 protein	2.41	2.75
	408000	L11690	Hs.198689	bullous pemphigoid antigen 1 (230/240kD)	2.40	3.67
	404049			NM_018937:-Homo sapiens protocadherin be	2.39	1.89
	433576	BE080715	Hs.161091	ESTs	2.39	1.59
	444083	AJ123195		gb:oo17a10.x1 Soares_NSF_F8_9W_OT_PA_P_S	2.38	2.59
	408208	BE018717		ESTs	2.37	2.12



5	431842	NM_005764	Hs.271473	epithelial protein up-regulated in cardi	2.36	2.23
	453931	AL121278	Hs.25144	ESTs	2.34	1.99
	452308	AI167560	Hs.61297	ESTs	2.31	3.82
	431048	R50253	Hs.249129	cell death-inducing OFFA-like effector a	2.31	2.18
	403752			NM_002753: Homo sapiens mitogen-activate	2.30	2.38
	402525			NM_002699: Homo sapiens POU domain, clas	2.30	2.36
	420223	N27807		ribosomal protein L4	2.30	1.73
	452023	AB032999	Hs.27566	KIAA1173 protein	2.29	4.54
10	443172	AW662964	Hs.199061	p300/CBP-associated factor	2.28	2.02
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	2.28	1.71
	414004	AA737033	Hs.7155	ESTs, Moderately similar to 2115357A TYK	2.27	1.81
	429554	NM_012275	Hs.207224	interleukin 1, delta	2.26	2.17
	436895	AF037335	Hs.5338	carbonic anhydrase XII	2.26	2.51
	404029			NM_018936: Homo sapiens protocadherin be	2.26	2.19
15	424049	AB014524	Hs.138380	KIAA0624 protein	2.26	2.99
	442423	BE326264	Hs.246842	ESTs	2.26	1.75
	408452	AA054683	Hs.192455	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.26	2.29
	428471	X57348	Hs.184510	stratfin	2.25	2.40
	410541	AA065003	Hs.64179	synenin-2 protein	2.24	2.46
20	415539	AI733881	Hs.72472	BMP-R1B	2.22	1.64
	425701	AA361850	Hs.240443	Human clone 137308 mRNA, partial cds	2.22	3.04
	423973	AF038461	Hs.136574	arachidonate 12-lipoxygenase, 12R type	2.22	3.24
	409178	BE393948	Hs.50915	kallikrein 5	2.19	4.74
	433091	Y12642	Hs.3185	lymphocyte antigen 6 complex, locus D	2.19	7.96
25	430171	AF086289	Hs.234766	skin-specific protein	2.17	3.56
	401994			Target Exon	2.14	3.34
	449228	AJ403107	Hs.148590	protein related with psoriasis	2.11	5.52
	446292	AF081497	Hs.279682	Rh type C glycoprotein	2.11	5.78
30	426150	NM_003658	Hs.167218	BarH-like homeobox 2	2.05	2.96
	452554	AW452434	Hs.58006	ESTs, Weakly similar to ALU5_HUMAN ALU S	2.04	4.17
	443162	T49951	Hs.9029	DKFZP434G032 protein	1.98	3.20
	400304	AF005082	Hs.113261	Homo sapiens skin-specific protein (xp33	1.94	3.20
	407395	AF005082		gb:Homo sapiens skin-specific protein (x	1.92	3.24
	412507	L36645	Hs.73964	EphA4	1.92	3.06
35	410310	J02931	Hs.62192	coagulation factor III (thromboplastin,	1.90	3.18
	425415	M13903	Hs.157091	involucrin	1.89	5.26
	417324	AW265494		ESTs	1.88	3.82
	412446	AI768015		ESTs	1.88	3.35
	451092	AI207256	Hs.13766	Homo sapiens mRNA for FLJ00074 protein,	1.87	3.75
40	444726	NM_006147		interferon regulatory factor 6	1.86	4.11
	424399	AF056687		AI056687: IL-BT095-190199-019 BT095 Homo	1.85	4.20
	434346	AA630445		ESTs	1.84	3.08
	446051	BE048061	Hs.37054	ephrin-A3	1.83	3.44
45	423725	AJ403108	Hs.132127	hypothetical protein LOC57822	1.78	3.45
	413859	AW992356	Hs.8364	Homo sapiens pyruvate dehydrogenase kina	1.76	2.99
	411908	L27943	Hs.72924	cytidine deaminase	1.74	3.60
	445656	W22050	Hs.21299	ESTs, Weakly similar to AF151840 1 CG-8	1.71	3.56
	413966	AA133935	Hs.173704	ESTs, Moderately similar to A53959 throm	1.71	3.38
50	424046	AF027866	Hs.138202	serine (or cysteine) proteinase inhibitor	1.70	3.92
	425650	NM_001944	Hs.1925	desmoglein 3 (pemphigus vulgaris antigen	1.68	3.25
	429299	AI620463	Hs.347408	hypothetical protein MGC13102	1.67	2.92
	429002	AW248439	Hs.2340	junction plakoglobin	1.66	3.35
	421335	X99977	Hs.103505	ARS component B	1.66	4.31
55	433662	W07162	Hs.150826	RAB25 RAB25, member RAS oncogene family	1.65	3.55
	429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	1.64	4.04
	414214	D49958	Hs.75819	glycoprotein M6A	1.64	3.59
	437897	AA770561	Hs.146170	hypothetical protein FLJ22869	1.62	3.13
	426350	NM_003245	Hs.2022	transglutaminase 3 (E polypeptide, prote	1.62	2.92
60	413163	Y00815	Hs.75216	protein tyrosine phosphatase, receptor I	1.57	3.09
	422106	D84239	Hs.111732	Fc fragment of IgG binding protein	1.53	3.39
	427751	AF000152		conserved gene amplified in osteosarcoma	1.52	3.53
	416881	N32520	Hs.141358	ESTs	1.52	3.06
	435013	H91923	Hs.110024	NM_020142: Homo sapiens NADH:ubiquinone o	1.49	2.91
	434574	AJ424458	Hs.33470	ESTs	1.48	3.05
65	454478	AW805749		superoxide dismutase 2, mitochondrial	1.48	3.54
	447330	BE279949	Hs.18141	ladinin 1	1.46	4.48
	414583	AA362907	Hs.76494	proline arginine-rich and leucine-rich r	1.41	2.99
	433640	AW390125	Hs.240443	Homo sapiens cDNA: FLJ23538 fls, clone L	1.40	3.71
70	427461	AA531527	Hs.332040	hypothetical protein MGC13010	1.36	2.98
	430205	AB025904	Hs.235168	carbonic anhydrase XIV	1.36	3.14
	450796	NM_001988	Hs.25482	envoptakin	1.34	3.74
	407394	AF005081		gb:Homo sapiens skin-specific protein (x	1.30	3.26
	430513	AJ012008	Hs.241586	G6C protein	1.28	3.26
75	411388	X72925	Hs.69752	desmocollin 1	1.22	3.64
	431089	BE041395		ESTs, Weakly similar to unknown protein	1.14	3.71
	444107	T46839	Hs.10319	UDP glycosyltransferase 2 family, polype	1.00	3.20
	443672	AA323352	Hs.9567	butyrobetaine (gamma), 2-oxoglutarate di	1.00	3.26

TABLE 528:

Key: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Pkey	CAT Number	Accession
412636	1438_1	M77830 NM_004415 AF139065 BG681115 BG740377 B1712964 BG000656 AA128470 BI438324 H27408 BE931630 BE167165 AW370827 AW370813
5		J05211 BG698865 BG740734 BG680618 BG737778 B1765807 BM353403 BM353248 AW177784 AW205789 AW951576 AW848592 BE182164
		BF149266 BE940187 B1060445 B1060444 BF350883 BE720095 BE720069 BE715154 BE082584 BE082576 BE004047 AA857316 B1039774 BE713818
		BE713548 AW170253 BE160433 B1039775 AW886475 BA462504 BE931734 BF149264 AA340777 BF381183 BG621737 AU127260 AW364859
		BE7993352 BG223489 BE619009 BF381184 BE715956 R58704 AA852212 AW366566 B1090358 BF087707 BE819046 BE819005 AA371712 BE073467
		BE819069 BE819048 B1036306 BG990973 B1040954 BF919911 AU140155 A1951766 A1434518 AW804674 BF752959 BE837009 BE925826 BF149265
10		AW995615 BE814264 B1039782 AU140407 BE709863 BF985642 BE001923 BF933510 AW265328 BG436319 BE182166 AW365175
		AW847688 BE818280 AW177933 BF873679 AW178000 BE082526 BF476866 BF086994 BF592276 BE082507 BE082514 BE082505 BF873693
		AW068840 AW847678 BF804153 AW365157 BE813930 BE002030 AW365153 BE184941 BF749421 BE184920 BF839562 BE184933 BF842254
		BE698470 BE931048 BF999889 BF368816 BE184924 BE159646 BE714632 BE184948 BG986845 AA131128 AA099891 W93488 C04715 BF096124
		BE855341 AW799304 AL603116 BE149760 BE705967 BE705966 BE705968 AW848723 AW376699 AW376817 AW376697 BG005097 BF751115
		BE696084 AW848371 AW376782 AW848789 AW849074 AW361413 BF927725 BF094211 AW997139 BE865474 BE185187 BE156621 BE715089
15		BE713297 BE713298 BE179915 AW799309 BF872345 BF088676 BE705939 AW752599 BG005197 BF350086 BE715196 BE715155 BF752396
		BF093817 BF831190 BF752409 BE006561 BG959922 BF094833 BF094748 BF094583 AW377699 AW607238 BE082519 AW377700 BF349467
		A1190590 A1554403 A1392926 AU158477 B1467252 AU159919 A1760816 BF082516 A1439101 AA451923 A1340326 A1590975 B1791553 A1700963
		A142882 AA039975 AA946936 AA644381 BM314884 AA702424 A117612 A190555 A1220573 A1304772 A1270345 A1627383 AA552300 A1911702
20		AW166807 A1346078 W55070 AA149191 AA26864 A1830049 AW780435 A1078449 A1819984 A1858282 B1468588 A1860584 A1025932 AA026047
		AA703232 AA658154 AA515500 AW192085 AA918281 T77861 A1927207 A1020563 BF082491 AW021347 A1568096 BE939862 AA088866 D12062
		AA056527 AA782109 W19287 W02156 AW150038 AA022701 T87181 H44405 A1910434 BF082513 A1494069 A1270027 A1535878 A1128330
		BG681425 BE706078 R20904 BG680059 BG676647 BF764409 AA026654 AV745530 B1762796 BG287391 AW798780 BE706045 BE926470
		AW799118 BF087996 BE002273 AW879451 A1571075 BE067786 AV721320 A1022862 N29754 C03378 N84767 AA131077 H30146 BE714290
		A1568689 A1568892 A1915596 AW105614 A1887258 A1538577 BE926474 BE067737 BG319486 AA247685 AW798883 AW103521 BF989173
25		AW860878 BE939707 BE185750 BE714064 BE713903 BE713868 BE713763 BG950164 BE713810 AW355151 BG955489 BE005272 BF915937
		AW365148 A1905927 BF992780 AW853812 BG954443 B1770853 BG679406 BG740832 BG681087 BG698430 AA455100 T87267 BE696209 BE696210
		B1089483 BE006273 BE77225 AW391912 BE925515 BG677012 BG741970 AA026480 BE705999 BG677157 BE009090 BG681378 BE712291
		BG961498 BG678984 B1040941 AA337270 AW384371 AW847442 B1058659 BE813665 W95048 W25458 AW177786 AA025851 BE931733 BF154837
		BG949393 BE714441 AW996245 BE711801 A1284090 BE064323 BE719390 BE940148 BG991212 BF375714 BF394522 BG996267 T48793 B1013292
30		BE001925 AW365156 AW365154 AW606653 BF763109 BE931637 BE167181 BE713879 BF354008 BF678726 H90899 AW365145 W38382 A1498487
	445493	423456_1
	416730	1988296_1
	444083	10908_12
	408208	642734_1
	420223	191648_1
	417324	292720_1
35		H80564 T99937 T70802
		B1836699 A121915
		B1757837 AW439843 AW172765 BE018717 BE464329 BE302285 H96902 BF477981 BE674508 BE670755 H95980 T15387
		N27807 AA256634 BE276324
		BG775668 BG680336 AW991605 AA455904 AW265494 AW265432 BF911380 AA456370 BF911379 AA195677 BF914311 BF913866 BG775059
		BG951874 A1572169
40	412446	63467_1
		BC021735 A1669212 AL120184 A1769949 BE701002 BE184363 BE819031 BG702238 BF090049 BF963318 BF961912 BF943013 AA934514 AA151245
		BF960659 AA987907 Z41449 BF908059 BF908053 BF908040 BE699424 BF908060 BF962832 BF952020 BF963134 B1035538 BF908052 BF908057
		BF090026 BF943158 A1632924 BF512340 BF952021 BF960776 BF943437 BF942847 A1768015 F09778 F04816 F02721 AA102645 A1633838
		AA617929 BF947001 B1035448 BE935876 AW890837 AW898604 BF957405 BF963433 BG704815
	444726	3503_2
		BG285809 BE940673 BG432524 BE157554 BG676980 AU144284 A1745383 A19159045 A1693500 AW293668 AW371408 BE856107 A1338042
		AW188320 A1698246 BE673290 AW297653 AA156532 A1017342 A1916754 A190644 A184302 AA857671 BE857018 A1037420 A1318157 AW204327
		AW646668 AW274339 AA582788 A1345741 AW301433 A1873468 AW137388 BF718731 BF718413 AA877495 BF001575 A1824693 AW849604
		AW849405 AW849396 AW849173 BE673179 A1611327 AA705753 BE715478 AW849414 AW849399 A1085759 A1140849 T67412 A1898885 AW104647
45		A1912495 A189874 A1744241 BE717113 BE717108 BE715564 A1872527 AA029457 C00338 A169558 BE715577 AA045413 BF843813
	424399	2196_1
		NM_058173 AF414087 W72837 BF742809 AW070916 BE092421 A1905687 AA340069 BE074512 A1905623 A1905633 BG202312 W72838 A1139456
		BG218084 BE926938 BE186013 AW176044 AW291950 BG185269 BG197186 BG192597 BG183176 BG207535 A1127172 BE815819 A1905624
		R75793 BG202313 A1905837 BE815853
50	434346	MH1094_14
		AK066896 A1924216 A1660493 A1984141 A1991272 AA593860 A1983793 A1346155 A1274929 A1281211 A1821178 BC020841 BF352476 BF843140
	427751	15028_1
		BF917041 W80832 AA630445 BF350167 BE162052 BE931808 A1572329 BG536379
		BE875818 AW751975 W39241 BF808798 W22600 BF082190 AA031290 R42801 H98235 H17925 A1631236 A1933786 H42736 AF000152 AU123911
		AW410526 BM354207 BF800492 B1042340 BE019322 AL597008 AW327818 B1041915 AW504825 AW504941 BF987969 NM_005730 U81556
		A1422831 AU154008 AA147822 AA831109 A1089244 A1360868 A168024 A1819848 AA811327 A1355616 AA281629 A1880578 A1274316 AW014622
55		A1268660 A1270283 AA171981 A1349410 AA402469 AA21985 A1004864 A1423497 A1361503 A1363096 AW805345 A1539979 A1553967 AW502264
		A1290698 N22420 A1281054 A1500699 AW342035 C75122 AW504577 A1130811 AA23567 R79086 A1860451 BE222885 A1697830 A1279575 BF438693
		AW576277 BE218210 A1952376 AA506609 A147556 A1391690 A1991622 A1696368 A1784664 AA741555 A1002681 AW474554 AW474508 D25623
		A1493929 AA179800 W73566 AW411368 AA147971 AA088581 BF804510 A145809 AU148108 AA223219 A157840 AW169757 A1537862 N42341
		A1128667 AW327853 AA713915 W15255 W56743 AA058322 H81878 AA723464 N27523 R37745 AA613566 AL526353 A1905211 BF802713 N40338
60		AA249397 BF752939 BE250441 H64761 BF853011 H81877 H96088 AL576453 W73585 H39990 AW438965 BF899684 A1040299 AL561879 AA293821
		H27760 BC018922 AL533396 BE513580 BF432649 A1884985 AA404264 AW024396 AW167863 AW027036 A1302177 A1660487 AW026086 BF432564
		BF091011 A1193156 AA744623 A1859510 B1063081 B1061541 AA777036 BG058486 B1063555 A1349411 BF874521 AW139801 A1268585 AA401267
		A1905209 R64276 N72043 AF022231 B1256540 AU134437 BG826972 BE298386 AW134499 AW206089 BF846730 AW500331 BF849336 B1041697
		A1857745 AW192840 AW410527 A1697435 AW006631 AW504124 AL048926 A1085476 AW327855 AA459344 AW207516 AW204875 BM142514
65		BF436650 AA960980 AW242609 B1012363 AW837102 BE703126 BE814612 BE837981 BE703141 BF343101 R47375 AA031413 N40264 BG027363
		BF526360 BE391263 AA280192 BE294042 BE250630 AU147734 AU148610 AA196787 N59465 AW575791 H16738 H96089 H64762 AW005603
		BE857292 A1719393 AU155418 BG770385 AA339673 BG337748 H42694 BE834346 AA090896 BE619985 BM006968 R46008 BF304621 AA172280
		AW957721 BF304885 BF933455 BF809973 BG386280 AW079808 T51091 AL520569 BE694350 T06360 BF347780 BE560703 BE296629
	454478	4273_16
	407394	27110_2
70	431089	125941_2
		AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538
		AF005081 BG193848
		BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826
75	TABLE S2C:	
	Pkey:	Unique number corresponding to an Eos probe set
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA
		sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495.
	Strand:	Indicates DNA strand from which exons were predicted.
	Nt_position:	Indicates nucleotide positions of predicted exons.
80	Pkey	Ref
	401781	7249190
	401780	7249190
	402075	8117407
	401760	9929699
		Strand
		Minus
		Minus
		Plus
		Plus
		Nt_position
		83215-83435,83531-83656,83740-83901,8423
		28397-28617,28920-29045,29135-29296,2941
		121907-122035,122804-122921,124019-12416
		83126-83250,85320-85540,94719-95287

401747	9789672	Minus	118596-118816,119119-119244,119609-11976
402294	2282012	Minus	2575-3000
401785	7249190	Minus	165776-165996,166189-166314,166408-16656
405542	9857564	Plus	71331-72183
5 402970	9650703	Minus	124891-125049
400995	8099094	Plus	141186-141601
405885	7677703	Minus	42574-42998
404049	3688074	Minus	75765-78155
10 403752	7678857	Plus	33704-33828
402525	9800048	Minus	19748-20683
404029	7671252	Plus	108716-111112
401994	4153858	Minus	42904-43124,43211-43336,44607-44763,4519

15 **TABLE 53A: ABOUT 298 GENES UPREGULATED IN MELANOMA METASTASES RELATIVE TO PRIMARY MELANOMAS**  
 Table 53A lists about 298 genes upregulated in melanoma metastases relative to primary melanomas. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

20 **Key:** Unique Eos probeset identifier number  
**ExAccn:** Exemplar Accession number, Genbank accession number  
**UnigeneID:** Unigene number  
**Unigene Title:** Unigene gene title  
**R1** 90th percentile of melanoma metastasis AIs divided by the 90th percentile of primary melanoma AIs  
**R2** 90th percentile of melanoma metastasis AIs divided by the 90th percentile of primary melanoma AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

Key	ExAccn	UnigeneID	Unigene Title	R1	R2
407245	X90568	Hs.172004	titin	10.56	11.32
412228	AW503785	Hs.73792	complement component (3d/Epstein Barr vi	9.22	6.14
426752	X69490	Hs.172004	titin	8.78	10.44
18310	AA814100	Hs.86693	ESTs	8.65	6.49
414522	AW518944	Hs.76325	immunoglobulin J chain	8.37	4.39
433447	U29195	Hs.3281	neuronal pentraxin II	8.27	7.25
456373	BE247706	Hs.89751	membrane-spanning 4-domains, subfamily A	7.78	6.70
425545	N98529	Hs.158295	Homo sapiens, clone MGC:12401, mRNA, com	7.49	9.02
428087	AA100573	Hs.182421	troponin C2, fast	7.45	7.65
436485	X59135	Hs.156110	immunoglobulin kappa constant	7.35	6.18
414646	AA353776	Hs.901	CD48 antigen (8-cell membrane protein)	6.97	5.75
412519	AA196241	Hs.73980	troponin T1, skeletal, slow	6.15	6.33
430280	AA361258	Hs.237868	interleukin 7 receptor	6.07	3.11
449078	AK001256	Hs.22975	KIAA1576 protein	6.05	8.55
437952	D63209	Hs.5944	solute carrier family 11 (proton-coupled	6.03	5.36
412561	NM_002286	Hs.74011	lymphocyte activation gene 3	5.85	5.57
431574	AW572659	Hs.261373	hypothetical protein dJ434014.3	5.74	6.40
458079	AI796870	Hs.54277	DNA segment on chromosome X (unique) 992	5.72	4.76
417880	BE241595	Hs.82848	selectin L (lymphocyte adhesion molecule	5.71	5.00
429412	NM_008235	Hs.2407	POU domain, class 2, associating factor	5.69	3.84
420338	AA825595	Hs.88269	Homo sapiens, clone MGC:17339, mRNA, com	5.37	4.12
430580	AA806105	Hs.300697	immunoglobulin heavy constant gamma 3 (G	5.31	6.02
428804	AK000713	Hs.193736	hypothetical protein FLJ20706	5.29	7.97
410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	5.26	2.93
445784	AI253155	Hs.146065	ESTs	5.12	3.10
409461	AA382169	Hs.54483	N-myc (and STAT) interactor	5.05	3.41
414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	4.59	4.00
420301	AA767526	Hs.22030	paired box gene 5 (B-cell lineage specifi	4.47	3.92
453857	AL080235	Hs.35861	ORFZP586E1621 protein	4.46	3.61
428242	H55709	Hs.2250	leukemia inhibitory factor (cholinergic	4.37	3.22
414829	AA321568	Hs.77436	pleckstrin	4.35	3.35
417878	U90916	Hs.82845	Homo sapiens cDNA: FLJ21930 fls, clone H	4.35	2.68
422603	BE242587	Hs.118651	hematopoietically expressed homeobox	4.27	2.67
451099	RS2795	Hs.25954	interleukin 13 receptor, alpha 2	4.27	3.67
441623	AA315805	Hs.170121	desmoglein 2	4.24	3.66
422241	Y00062	Hs.170121	protein tyrosine phosphatase, receptor t	4.22	3.60
417022	NM_014737	Hs.80905	Ras association (RafGDS/AF-6) domain fam	4.20	2.58
426317	AA312350	Hs.169294	transcription factor 7 (T-cell specific,	4.16	5.82
430770	AA765694	Hs.123296	ESTs	4.15	5.10
420931	AF044197	Hs.100431	small inducible cytokine B subfamily (Cy	4.12	5.06
406707	S73840	Hs.931	myosin, heavy polypeptide 2, skeletal mu	4.11	3.82
444863	AW384082	Hs.104879	serine (or cysteine) proteinase inhibito	4.10	2.68
432306	Y18207	Hs.303090	protein phosphatase 1, regulatory (inhib	4.04	4.10
417105	X60992	Hs.81226	CD6 antigen	4.03	4.51
409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA119	4.02	3.72
432485	N90866	Hs.276770	CDW52 antigen (CAMPATH-1 antigen)	3.99	4.87
415165	AW887604	Hs.78065	complement component 7	3.97	3.98
421181	NM_005574	Hs.184585	LIM domain only 2 (rhombotin-like 1)	3.96	3.19
421712	AK000140	Hs.107139	hypothetical protein	3.95	7.34
408380	AF123050	Hs.44532	diubiquitin	3.94	2.45
422423	AF283777	Hs.116481	CD72 antigen	3.93	3.29
408989	AW361666	Hs.49500	KIAA0746 protein	3.90	3.02
424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	3.84	3.40
420137	AA306478	Hs.95327	CD3D antigen, delta polypeptide (TIT3 co	3.84	4.84
424922	BE386547	Hs.217112	hypothetical protein MGC10825	3.78	3.04
400440	X83957	Hs.83870	nebulin	3.77	4.89

5	418870	AF147204	Hs.89414	chemokine (C-X-C motif), receptor 4 (luc	3.74	3.91
	450293	N36754	Hs.171118	hypothetical protein FLJ00026	3.74	2.89
	432606	NM_002104	Hs.3066	granzyme K (serine protease, granzyme 3,	3.72	2.65
	408548	AA055449	Hs.63187	ESTs, Weakly similar to ALUC_HUMAN !!!	3.72	2.43
	429490	AJ971131	Hs.23889	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.71	2.23
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	3.70	2.36
	419749	X73608	Hs.93029	spermatostonein, cwcv and kazal-like d	3.67	3.30
	410016	AA297977	Hs.57907	small inducible cytokine subfamily A (Cy	3.67	6.72
10	433658	L03678	Hs.156110	immunoglobulin kappa constant	3.66	2.49
	424153	AA451737	Hs.141496	MAGE-like 2	3.64	2.65
	421666	AL035250	Hs.1408	endothelin 3	3.64	5.92
	417696	BE241624	Hs.82401	CD69 antigen (p60, early T-cell activati	3.61	2.69
	429732	U20158	Hs.2488	lymphocyte cytosolic protein 2 (SH2 doma	3.60	1.95
15	422173	BE385828	Hs.250619	phorbol-like protein MDS019 (CEM15)	3.59	3.08
	413778	AA090235	Hs.75535	myosin, light polypeptide 2, regulatory,	3.57	11.26
	442379	NM_004613	Hs.8265	transglutaminase 2 (C polypeptide, prote	3.56	4.91
	439859	AW292872	Hs.124554	ESTs	3.53	4.15
	453064	R40334	Hs.89463	potassium large conductance calcium-acti	3.51	2.88
20	411252	AB018549	Hs.69328	MD-2 protein	3.46	1.82
	414324	Y14768	Hs.890	lymphotoxin beta (TNF superfamily, membe	3.45	4.65
	420286	AI796395	Hs.111377	ESTs	3.42	2.47
	413385	M34455	Hs.840	indoleamine-pyrole 2,3 dioxygenase	3.42	3.09
	442104	L20971	Hs.188	phosphodiesterase 4B, cAMP-specific (dun	3.41	2.22
25	405545			Target Exon	3.40	2.46
	416373	AA195845		ESTs, Weakly similar to S12658 cysteine-	3.40	5.64
	417410	AF063020	Hs.82110	PC4 and SFRS1 interacting protein 1	3.37	4.27
	418522	AA605038	Hs.7149	Homo sapiens cDNA: FLJ21950 fis, clone H	3.33	2.37
	433470	AW960564		transmembrane 4 superfamily member 1	3.33	3.13
30	416975	NM_004131	Hs.1051	granzyme B (granzyme 2, cytotoxic T-lymp	3.32	2.51
	442149	AB014550	Hs.8118	KIAA0650 protein	3.30	2.29
	411852	AA528140	Hs.107515	ESTs, Weakly similar to T00329 hypotheti	3.29	3.85
	447023	AA356764	Hs.17109	integral membrane protein 2A	3.24	2.79
	421566	NM_000039	Hs.1395	early growth response 2 (Krox-20 (Drosop	3.23	1.78
35	414176	BE140638	Hs.75794	EDG-2 (endothelial differentiation, lys	3.22	2.90
	447513	AW955776	Hs.313500	ESTs, Moderately similar to ALU7_HUMAN A	3.18	4.16
	421893	NM_001078	Hs.109225	vascular cell adhesion molecule 1	3.17	3.59
	424148	BE242274	Hs.1741	integrin, beta 7	3.14	2.29
	406648	AA563730	Hs.277477	major histocompatibility complex, class	3.13	3.05
40	429505	AW820035	Hs.278679	a disintegrin and metalloproteinase doma	3.13	2.36
	446619	AJ076843	Hs.313	secreted phosphoprotein 1 (osteopontin,	3.12	2.55
	406704	M21665	Hs.929	myosin, heavy polypeptide 7, cardiac mus	3.12	5.54
	443885	H91806	Hs.15284	ESTs	3.08	3.55
	418203	X54942	Hs.83758	CDC28 protein kinase 2	3.08	2.20
45	417640	D30857	Hs.82353	protein C receptor, endothelial (EPCR)	3.06	3.21
	447232	AW499834	Hs.327	interleukin 10 receptor, alpha	3.05	3.36
	409103	AF251237	Hs.112208	XAGE-1 protein	3.04	2.07
	413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	3.04	2.24
	421834	BE543205	Hs.288771	DKFZP586A0522 protein	3.03	1.91
50	444666	BE293347	Hs.11638	long-chain fatty acid coenzyme A ligase	3.01	3.43
	425295	AA431366	Hs.37251	ESTs	3.01	3.07
	429109	AL008837	Hs.196352	neutrophil cytosolic factor 4 (40kD)	2.99	2.55
	420340	NM_000734	Hs.97087	CD32 antigen, zeta polypeptide (TfR3 com	2.98	5.98
	418968	NM_000078	Hs.89538	cholesteryl ester transfer protein, plas	2.97	2.68
55	438914	N93892	Hs.10727	ESTs	2.97	2.19
	418391	NM_003281	Hs.84673	troponin I, skeletal, slow	2.96	2.68
	419056	M89957	Hs.89575	CD79B antigen (immunoglobulin-associated	2.96	3.94
	449523	NM_000579	Hs.54443	chemokine (C-C motif) receptor 5	2.96	4.02
	450847	NM_003155	Hs.25590	stanniocalcin 1	2.96	3.24
60	418460	M26315	Hs.85258	CD8 antigen, alpha polypeptide (p32)	2.95	2.73
	426711	AA383471	Hs.343800	conserved gene amplified in osteosarcoma	2.94	2.36
	426559	AB001914	Hs.170414	paired basic amino acid cleaving system	2.93	2.17
	424528	AW073971	Hs.238954	ESTs, Weakly similar to KIAA1204 protein	2.93	2.70
	408633	AW963372	Hs.46677	PRO2000 protein	2.92	2.16
65	443195	BE148235	Hs.193063	Homo sapiens cDNA FLJ14201 fis, clone NT	2.92	2.92
	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypotheti	2.90	2.09
	437802	AJ475995	Hs.122910	ESTs	2.90	3.71
	417771	AA804698	Hs.82547	retinoic acid receptor responder (lazaru	2.90	3.56
70	438000	AI825880	Hs.5985	non-kinase Cdc42 effector protein SPEC2	2.90	2.60
	414555	N98569	Hs.76422	phospholipase A2, group IIA (platelets,	2.87	2.07
	421958	AA357185	Hs.109918	ras homolog gene family, member H	2.87	3.48
	420224	M84371	Hs.96023	CD19 antigen	2.86	4.77
	434883	AW381538	Hs.19807	hypothetical protein MGC12959	2.85	5.44
	452852	AK001972	Hs.30822	hypothetical protein FLJ11110	2.84	2.55
75	427527	AI809057	Hs.153261	immunoglobulin heavy constant mu	2.84	4.16
	446231	NM_002163	Hs.14453	interferon consensus sequence binding pr	2.83	2.97
	408838	AI669535	Hs.40369	ESTs	2.82	1.82
	429124	AW505086	Hs.196914	minor histocompatibility antigen HA-1	2.82	4.21
	425023	AW956889	Hs.154210	EDG-1 (endothelial differentiation, sph	2.79	4.00
80	425388	AA329384	Hs.156110	immunoglobulin kappa constant	2.79	2.28
	414290	AI568801	Hs.71721	ESTs	2.78	3.19
	418255	AW135405	Hs.37251	ESTs	2.76	3.27
	451952	AL120173	Hs.301663	ESTs	2.75	1.74
	424865	AF011333	Hs.153563	lymphocyte antigen 75	2.75	3.10

	409245	AA361037		rRNA isopentenylpyrophosphate transferase	2.74	2.12
	453920	AI133148	Hs.36602	I factor (complement)	2.74	3.08
	443958	AA287702	Hs.10031	KIAA0955 protein	2.74	2.34
5	434094	AA305599	Hs.238205	hypothetical protein PR02013	2.73	1.67
	436476	AA326108	Hs.33829	bHLH protein DEC2	2.72	1.70
	428398	AI249368	Hs.98558	ESTs	2.72	2.06
	417141	U22662		nuclear receptor subfamily 1, group H, m	2.70	2.55
	427080	AW068287	Hs.301175	ras-related C3 botulinum toxin substrate	2.69	3.15
10	442485	BE092285	Hs.29724	hypothetical protein FLJ13187	2.69	1.99
	429317	AA831552	Hs.268016	Homo sapiens cDNA: FLJ21243 fs; clone C	2.69	1.70
	443998	AI620661	Hs.296276	ESTs	2.69	2.30
	417542	J04129	Hs.82269	progesterone-associated endometrial prote	2.68	3.23
	414291	AI289619	Hs.13040	G protein-coupled receptor 86	2.68	3.01
	448861	AL049951	Hs.22370	Homo sapiens mRNA; cDNA DKFZp564O0122 (	2.66	2.51
15	432435	BE218886	Hs.282070	ESTs	2.65	3.28
	430132	AA204686	Hs.234149	hypothetical protein FLJ20647	2.65	3.04
	427792	M63928	Hs.180841	tumor necrosis factor receptor superfam	2.64	3.82
	414696	AF002020	Hs.76918	Niemann-Pick disease, type C1	2.64	1.07
	420991	AW504814	Hs.287379	Homo sapiens mRNA for FLJ001111 protein,	2.64	2.51
20	401566			NM_005159:Homo sapiens actin, alpha, car	2.63	3.74
	444119	R41231	Hs.184261	ESTs, Weakly similar to T26686 hypotheti	2.63	2.13
	425231	AA527161		ESTs	2.61	2.95
	417427	M90391	Hs.82127	interleukin 16 (lymphocyte chemoattracta	2.61	1.90
25	437669	AI358105	Hs.123164	ESTs, Weakly similar to match to ESTs AA	2.60	4.45
	413856	D13639	Hs.75586	cyclin D2	2.60	5.71
	407928	NM_002262	Hs.41682	killer cell lectin-like receptor subfam	2.59	2.68
	443247	BE614387	Hs.333893	c-Myc target JPO1	2.58	2.77
	447131	NM_004585	Hs.17466	retinoic acid receptor responder (lazar	2.58	9.28
30	443021	AA368546	Hs.8904	Ig superfamily protein	2.58	4.49
	424779	AL046851	Hs.153053	CD37 antigen	2.58	3.88
	425235	AA353113	Hs.112497	Homo sapiens cDNA: FLJ22743 fs, clone H	2.57	2.09
	424265	AF173901	Hs.144287	hair/tear enhancer-of-split related with YRP	2.57	3.57
	426780	BE242284	Hs.172199	adenylate cyclase 7	2.56	1.86
35	452721	AJ269529	Hs.301871	solute carrier family 37 (glycerol-3-ph	2.56	2.90
	442904	AW575008	Hs.11355	thymopoietin	2.56	3.39
	433646	AA603319	Hs.155195	ESTs	2.54	2.19
	417289	D86962	Hs.81875	growth factor receptor-bound protein 10	2.53	4.56
	422640	M37984	Hs.118845	troponin C, slow	2.53	5.38
40	448413	AI745379	Hs.42911	ESTs	2.53	2.08
	429536	AA873016	Hs.206097	oncogene TC21	2.52	2.49
	446272	BE268912	Hs.14601	hematopoietic cell-specific Lyn substrat	2.52	3.46
	424378	W28020	Hs.167988	neural cell adhesion molecule 1	2.52	2.91
	410257	BE244044	Hs.61469	hypothetical protein	2.51	3.67
45	427609	AK000436	Hs.179791	hypothetical protein FLJ20429	2.51	3.11
	424868	AI568170	Hs.96886	ESTs	2.51	2.30
	418945	BE246762	Hs.89499	arachidonate 5-lipoxygenase	2.50	2.64
	420899	NM_001629	Hs.100194	arachidonate 5-lipoxygenase-activating p	2.50	3.04
	413441	AI929374	Hs.75367	Src-like adapter	2.49	2.37
50	414761	AU077228	Hs.77256	enhancer of zeste (Drosophila) homolog 2	2.49	1.82
	429493	AL134708	Hs.145998	ESTs	2.49	2.40
	419631	AW188117		popeye protein 3	2.48	1.85
	437175	AW968078	Hs.87773	protein kinase, cAMP-dependent, catalyti	2.48	2.32
	421552	AF026692	Hs.105700	secreted frizzled-related protein 4	2.47	4.17
55	420158	AI791905	Hs.95549	hypothetical protein	2.47	2.62
	453987	AA323750	Hs.235026	Homo sapiens, clone IMAGE:4247529, mRNA,	2.47	2.49
	429640	U83508	Hs.2463	angiotensin 1	2.47	2.57
	437330	AL353944	Hs.50115	Homo sapiens mRNA; cDNA DKFZp761J1112 (	2.46	2.42
	426969	AI936504		CDC-like kinase 1	2.46	2.41
60	427674	NM_003528	Hs.2178	H2B histone family, member Q	2.46	2.17
	405547			NM_018833:Homo sapiens transporter 2, A	2.46	2.84
	406878	U77534		gb:Human clone 1A11 immunoglobulin varia	2.45	2.89
	407013	U35637	Hs.83870	gb:Human nebulin mRNA, partial cds	2.45	3.40
	428746	AW503820	Hs.192861	Spi-B transcription factor (Spi-1/PU.1 t	2.43	6.25
65	453953	AW408337	Hs.36972	CD7 antigen (p41)	2.39	4.01
	427759	BE245578	Hs.2200	perforin 1 (pore forming protein)	2.39	4.56
	443071	AL080021	Hs.8986	complement component 1, q subcompone	2.39	3.31
	437211	AA382207	Hs.5509	ecotropic viral integration site 2B	2.38	3.15
	440596	HI3032	Hs.103378	hypothetical protein MGC11034	2.37	3.68
70	452651	AI218918	Hs.30209	KIAA0854 protein	2.36	4.08
	421563	NM_006433	Hs.105806	granulysin	2.34	3.25
	421924	BE514514	Hs.109606	coronin, actin-binding protein, 1A	2.33	3.38
	449092	U91641		alpha2,8-sialyltransferase	2.32	3.53
	425367	BE271188	Hs.155975	protein tyrosine phosphatase, receptor t	2.32	7.02
75	418117	AI922013	Hs.83496	linker for activation of T cells	2.30	3.56
	425795	AJ000479	Hs.159543	EDG-6 (endothelial differentiation, G-p	2.26	3.42
	428111	S76617	Hs.2243	B lymphoid tyrosine kinase	2.25	3.69
	439981	AI348408	Hs.124675	ESTs, Weakly similar to T14742 hypotheti	2.25	4.05
	425722	AI659076	Hs.97031	hypothetical protein MGC13047	2.25	3.44
80	436648	HI8656		ESTs	2.24	3.23
	452250	BE618654	Hs.28607	hypothetical protein A-211C6.1	2.23	3.08
	441715	AI929453	Hs.342655	Homo sapiens cDNA FLJ13289 fs, clone OV	2.23	3.30
	423397	NM_001838	Hs.1652	chemokine (C-C motif) receptor 7	2.22	3.25
	449626	AA774247	Hs.301637	zinc finger protein 258	2.21	3.14

5	412975	T70956	Hs.75106	clusterin (complement lysis inhibitor, S	2.18	3.41
	418739	AA310964	Hs.88012	SHP2 interacting transmembrane adaptor	2.15	3.62
	418185	AW958272	Hs.347326	intercellular adhesion molecule 2 (ICAM	2.09	5.21
	436420	AA443966	Hs.31595	ESTs	2.07	3.81
	418174	L20688	Hs.83656	Rho GDP dissociation inhibitor (GDI) bel	2.05	3.14
	420626	AF043722	Hs.99491	RAS guanyl releasing protein 2 (calcium	2.01	4.42
	428289	M26301	Hs.2253	complement component 2	2.00	3.33
	429683	AF148213	Hs.211604	a disintegrin-like and metalloprotease (	2.00	3.75
10	421445	AA913059	Hs.104433	Homo sapiens, clone IMAGE:4054868, mRNA	1.96	3.68
	450300	AL041440	Hs.58210	ESTs, Highly similar to ITH4_HUMAN INTER	1.91	4.84
	415445	AL043004	Hs.79337	KIAA0135 protein	1.91	3.41
	409817	BE295464	Hs.56607	Williams-Beuren syndrome chromosome regi	1.87	3.53
	416867	BE616731	Hs.80645	interferon regulatory factor 1	1.86	3.55
15	437740	AA810265	Hs.122915	ESTs	1.86	3.79
	437938	A1950087		gb:wp05cd02.x1 NC1_OGAP_Kid12 Homo sapien	1.83	3.42
	425240	AA306495	Hs.1869	phosphoglucosyltransferase 1	1.83	3.75
	406972	M32053		gb:Human H19 RNA geno, complete cds.	1.80	4.03
	430378	Z29572	Hs.2556	tumor necrosis factor receptor superfamily	1.78	3.53
20	437470	AL390147	Hs.134742	hypothetical protein DKFpZp547D065	1.78	3.39
	416350	AF188625	Hs.189507	phospholipase A2, group IID	1.78	5.48
	417852	AJ250562	Hs.82749	transmembrane 4 superfamily member 2	1.78	4.88
	414682	AL021154	Hs.76884	inhibitor of DNA binding 3, dominant neg	1.77	5.79
	444090	S69115	Hs.10306	natural killer cell group 7 sequence	1.74	3.41
	427278	AL031428	Hs.174174	KIAA0601 protein	1.74	3.80
25	418618	U66097	Hs.86724	GTP cyclohydrolase 1 (dopa-responsive dy	1.73	4.21
	420397	NM_007018	Hs.97437	centrosomal protein 1	1.73	3.21
	418678	NM_001327	Hs.167379	cancer/testis antigen (NY-ESO-1)	1.73	3.77
	459245	BE242623	Hs.31939	manic fringe (Drosophila) homolog	1.72	3.12
	425356	BE244879	Hs.155939	inositol polyphosphate-5-phosphatase, 14	1.71	3.55
30	423984	AF163825	Hs.136713	pre-B lymphocyte gene 3	1.70	7.70
	422355	AW403724	Hs.300697	coagulation factor VII (serum prothrombi	1.70	3.10
	451579	AW607731	Hs.26670	Human PAC clone RP3-515N1 from Z2q11.2-q	1.68	4.19
	451287	AK002158	Hs.26194	likely homolog of mouse immunity-associat	1.68	5.76
	416819	U77735	Hs.80205	pim-2 oncogene	1.67	3.17
35	409896	AW205479	Hs.279780	NY-REN-18 antigen	1.67	3.74
	447532	AK000614	Hs.18791	hypothetical protein FLJ20607	1.66	3.62
	426666	AW500131	Hs.171763	CD22 antigen	1.65	4.67
	412265	AA101325	Hs.86154	hypothetical protein FLJ12457	1.65	3.43
40	416971	R34657	Hs.80588	uncoupling protein 2 (mitochondrial, pro	1.64	3.66
	430449	AA352723	Hs.241471	RN86	1.62	3.09
	424661	M29551	Hs.151531	protein phosphatase 3 (formerly 2B), cat	1.61	3.37
	453027	AI879341	Hs.539	ribosomal protein S29	1.61	11.60
	410068	AI633888	Hs.58435	FYN-binding protein (FYB-120/130)	1.60	3.28
45	440446	NM_013385	Hs.7189	pleckstrin homology, Sec7 and coiled/coi	1.59	3.14
	453657	W23237	Hs.296162	AD037 protein	1.59	3.12
	418102	RS8958	Hs.26608	hypothetical protein MGC15880	1.58	3.55
	424614	X54486	Hs.151242	serine (or cysteine) proteinase inhibito	1.58	3.07
	406791	AI220684	Hs.347939	hemoglobin, alpha 2	1.55	5.06
50	421703	AI936513	Hs.1416	Fc fragment of IgE, low affinity II, rec	1.53	3.59
	421859	AA356620	Hs.108947	KIAA0050 gene product	1.52	3.41
	416783	AA206186	Hs.79889	monocyte to macrophage differentiation-a	1.52	3.28
	456086	AL161999	Hs.77324	eukaryotic translation termination facto	1.47	3.34
	425783	AI026740	Hs.1948	ribosomal protein S21	1.46	4.95
55	407682	AL035858	Hs.3807	FXYD domain-containing ion transport reg	1.46	3.48
	409169	F00991	Hs.50889	(clone PVHLC2-24) myosin light chain 2	1.45	3.25
	435624	AF218942	Hs.24889	formin 2	1.45	3.11
	413969	X14034	Hs.75648	phospholipase C, gamma 2 (phosphatidylin	1.45	3.33
	426530	U24578	Hs.278625	complement component 4A	1.44	4.27
60	425928	S55736	Hs.238852	ESTs, Weakly similar to hypothetical pro	1.44	3.65
	418219	AA731836	Hs.137319	ESTs	1.43	4.01
	429071	AW794126	Hs.195453	ribosomal protein S27 (metalloprotein-stimuli	1.41	4.23
	418473	AA243335	Hs.309943	nuclear body protein Sp140	1.41	3.29
	423766	AA303799	Hs.300141	ribosomal protein L39	1.40	3.22
65	430150	L05148	Hs.234569	zeta-chain (TCR) associated protein kina	1.39	3.29
	416370	N90470	Hs.203697	CD38 antigen (p45)	1.36	3.08
	406758	AA552326	Hs.77039	ATP synthase, H transporting, mitochondr	1.32	3.29
	448610	NM_006157	Hs.21602	nel (chicken)-like 1	1.31	3.85
	444674	BE562200	Hs.244	amino-terminal enhancer of split	1.30	3.10
70	407694	U77594	Hs.37682	retinoic acid receptor responder (lazar	1.30	3.91
	427349	AA360154	Hs.177415	Finkel-Biskis-Reilly murine sarcoma viru	1.28	3.59
	419032	W81330	Hs.99877	ESTs, Highly similar to JAK3B [H.sapiens	1.28	3.21
	436553	AW407157	Hs.8997	immunoglobulin lambda locus	1.27	4.00
	415138	C18356	Hs.295944	tissue factor pathway inhibitor 2	1.24	3.25
75	406623	X69392		ribosomal protein L26	1.24	3.31
	437895	AB014568	Hs.5898	KIAA0668 protein	1.21	3.33
	421143	AB024536	Hs.102171	immunoglobulin superfamily containing te	1.18	3.35

TABLE 53B:

Pkey: Unique Eos probe/identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

Pkey CAT Number Accession

5	41623	3362_1	BC022413 BE395396 BF754175 AA506621 BE706665 BE706678 AA723159 BE153169 BE706729 BE706558 BE153312 BE706706 AW371853 AW371849 BE153241 BC017410 AJ337912 AJ090244 AW090300 BE219837 AJ623651 BE501576 BE501734 AJ42232 AJ023964 AA58424 AA975373 AJ288904 AJ984583 AA890325 N32562 AJ358102 AW241694 AJ036448 AJ572071 AJ018389 AA576391 AA977874 AW183392 W37448 AA612894 AJ277548 H89551 AJ699774 H89365 AA315805 AW579186 BC014584 BC014581 AW780125 AJ672414 BE328145 AW600919 BF031306 AW172758 BE708322 AA345675 BE875779 H28241 H25318 BF540913 BG179688 BF110202 AA528775 W37573 BE041644 AW366504 BM129522 BM129822 AJ122760 BE718200 AW887496 AA149420 BE706307 BE533936 BE748765 AJ373653 R75904 BF979185 BF691393 BG495595 BI094458 BE706702 BG496569 BF248373 BG494800
10	416373	3442_1	AK056582 AW755252 AL506757 BF827376 BF827373 BF827375 BF827369 BF826900 F01252 BC022688 BI850312 AA195845 BF825671 BF574821 Z21696 F32854 AA211780 F21569 AJ288453 AJ036878 AA180309 AJ074627 AA192950 AA661688 F36698 F32290 F28773 F22692 AA424993
15	433470	6624_1	AW340328 AA192247 BF672229 BF575143 BF673106 BF693623 X75684 AL573167 AJ445461 AJ453743 AJ983655 AJ564644 AA977180 AJ694111 AJ591358 AW071625 AJ678712 AJ720939 AJ927769 BE439796 AJ963432 AA292956 AW192593 AJ855838 AJ696905 AJ242384 AJ161312 AJ911921 AJ597801 BI494959 AJ240988 AJ492554 AW262737 BE044033 AW008570 AW629505 BI494958 AA088439 AA706057 BF222820 BF533608 BE501957 AA524526 BE044134 AW572531 AW015724 BE349186 AA043217 BE219784 AJ799814 AA129575 AJ671727 AJ470033 BE646195 AW779725 AA903050 AA147228 AA404570 AJ075878 W38161 AJ972739 AW673152 AA723200 C06123 BF057147 AA627686 AA157944 AJ990245 AA652517 T32487 AJ800106 AJ333170 AJ859160 W45410 AJ990827 AW275048 AA182640 AA478328 AJ298935 AW085158 AW471421 AW103470 AW300456 AW191997 AJ823466 AA962397 AA136658 AJ251817 AW539104 AA724739 AA411100 AA191349 AA757735 AA037696 AJ769516 AW772283 AA010631 AJ692846 AJ051065 H80983 R79933 AJ850693 AJ245632 AJ349390 AA148284 AJ798502 AA487893 AJ621320 AW194772 C06365 AA953883 BE858936 AJ918523 AJ872628 AJ927217 AJ435453 AJ189366 AW338678 AJ261359 AJ500576 BF477735 AJ032569 AJ972899 AJ985583 Z28771 AJ638829 AJ693030 AA603586 BE773488 AW339301 BE773489 BE773462 BE773495 AJ650338 BE773499 AJ745717 BE811475 BE811470 BE811464 BE811418 BE811415 BE811400 BE811398 BE811388 BE811352 BE773501 BE773494 BE773486 BE773474 BE773473 BE773470 BE773461 BE811350 BE811337 BF593847 BG055071 AW675302 BF003068 AJ719173 BE811348 AJ582462 AJ686240 BE773500 AJ244845 AJ565439 AJ918453 AJ472527 AA467404 AA035576 AA191414 AL674145 C05782 AJ589264 D07558 AJ468237 AJ432033 AA989662 R21752 BF002457 AA988297 AL574095 AL576200 AL571074 AL574525 AW578810 BG498381 AJ928364 BE879732 AA479834 AA479712 C17732 BM091258 BF843901 AW820230 C17476 BE327120 AA129574 AA136645 BF843900 AW806193 AA502832 AA649494 AL568520 AL547960 BE706337 BE811360 BE773498 BE811401 BE773484 BE811437 BE811380 BE811399 BF997171 BF757734 BE926037 AJ375956 C06111 AW088968 BE811404 BE811472 AJ865912 AJ925607 AJ871950 AJ093510 BE905927 BE811435 AA191387 AW772000 BE811453 BE811437 BF844522 BI044896 AJ744233 AW984527 C17504 BF843883 AJ248307 BE773483 AJ567995 W60075 BF941183 AJ738844 BE811458 BE773481 AJ262930 AA948565 BE706942 BE156360 T65026 AW242958 AW199564 BE905184 AA722206 AJ344943 AJ348877 AJ334860 BE621857 BE156280 AA454099 AA037722 BF843897 AW806183 AA043216 BG482896 AA182734 AA877242 AW372926 H27252 R38114 BF851858 BE156214 AA190427 T91762 AA035067 AA837326 T10930 BF906587 BI755027 BG056731 BC008442 BC010166 AL550134 AL553096 AL548700 AL550751 AL547978 AL545286 AL540643 AU118627 AL601379 BI259821 BG741786 BI868522 AU135866 BI552770 BI259210 BI256520 BI255569 BG485098 BI258228 BG489501 BM044512 AU133984 AL556586 BE745111 BI222633 AU133917 BG288151 BI260715 BI550550 BG500773 BI551761 BG707601 BI818593 BF691383 BG721129 BG541578 BE906666 BG751098 BI224135 BG400746 BG478065 BE790436 AW080238 AU137549 BG429896 BE392486 AW961686 BG721056 BE908365 BE546656 BG541235 AW583735 BG528290 BI260895 AW651691 BM048974 BM043805 BG142185 AA315188 AJ446615 C06300 BG497644 AW088544 AJ815987 BG528631 BE619182 AW239185 AW062910 AW062902 AA347236 F11933 AA488005 AA301631 AA376800 D56120 AA343532 AA308636 F00242 AA376086 AA316968 AA343799 BI870221 BE910282 BG538748 AW960564 AV732879 D16854 AA192519 BF922148 AA216013 BG624091 BE544387 BG507008 AW176446 BF790033 BE088925 BE088854 AA921353 R21800 AA011222 T97525 AF030234 BC017465 BG008526 AW505550 BM460141 AA7324 AA361037 AA321632 H45606 AV752798 AV657116 AA296632 AJ137857 AW467027 AJ742080 AJ624350 H58206 AA478518 AW439997 AW393555 AW393523 AJ559753 AJ080732 R66856 H01374 BI257369 BI259830 AW960845 BM466525 AW956813 BE768647 AV658853 BM055248 BF372070 BF372055 BF372061 AA347852 AA905863 BG505078 AV654024 BF093291 AW021929 H22650 AA597115 BG496341 BE697763 BI254209 BG499543 H42946 BI059780 BI085741 H87896 H87599 BF691752 BE768511 BG940948 W37195 BF372041 BE883796 BF372082 BF367329 BF909744 AW966003 AV714014 BI492858 BI495144 AA921845 AJ693426 AJ652147 AJ435449 H47325 AJ34429 AA573137 AJ183429 AJ829862 AJ325226 BF513937 AJ189561 AJ221962 AJ378034 AW118897 AW665247 AW340077 H41605 AA478519 AA463875 AJ858260 AA463379 AJ292305 BE045947 AA971089 AJ125820 BG940947 AJ080245 AA884954 AJ125702 AJ28934 AA931835 AJ358631 AW439905 AJ027833 AJ399648 AJ014533 AA347851 AA738261 N67374 N69081 AJ768667 AA948472 AJ819214 AA293133 AJ186725 AA889214 AJ222635 BI495143 N29605 H48812 AA769041 AJ492769 D56771 AA095911 BE222062 D56772 W372265 BM054985 O12465 BG534562 AW003511 H87486 H42880 AW190293 BF954697 BF377611 H22043 BI255749 BI492848 H16217 H21580 H22651 H88179 H87354 H44052 H25165 H44128
50	417141	9517_1	AJ391712 U22682 NM_005693 AW166878 BF339795 AJ970974 AJ521157 AJ336082 AW339789 AJ286862 BF477594 BF477593 AJ703008 AJ290961 AJ049684 AW770753 AJ208561 AJ699406 F33996 AA630563 AJ985346 AJ927058 AA533982 AW204589 AJ206938 AW590068 AJ263769 AA991550 AJ192005 AL558946 AL524337 AL516239 AL580848 AL580658 AJ719135 AW026500 AJ698217 AJ872977 AJ670983 AJ654870 AA493407 AA548525 AJ016420 AA843563 W15576 H61726 AA913245 BF438146 AL524338 BI762380 AU136488 BI759892 AV655930 T78977 BI524075 BE538944 AA527161 BG211784 AA527065 AA505489 AW152550 BC022323 AF204171 NM_022361 BM264431 BE670789 AW188117 AJ025298 AA861832 H84897 AJ382294 AA662874 AW993380 BE813742 H84368 AJ188074 N20482 H84369
55	425231	235504_1	MS9287 AJ936504 AJ694705 AJ679216 AJ679235 BF110184 AW518110 AJ679811 AW054981 BE465531 BE327409 AW339105 BI714787 AJ871568 AW129115 AU145080 AJ223299 AW129986 AA780771 BJ6654629 AU144657 BF437422 AJ478374 AA492513 AU157562 AJ826962 AU145528 AJ951093 AW513819 AA042656 AA725690 AA733176 AJ028702 AJ251890 AJ811729 AW975208 AW339589 AJ147868 AJ157862 AA629327 BF476670 BE464796 AW510511 AA399098 AA398210 AJ291998 AJ160296 AU158075 N34811 BE326407 AJ270552 AA496923 AA508002 AJ270284 AJ139504 BF437009 AJ354626 AJ936336 AA287250 AA491855 BF445818 AA688026 AA284510 AW151564 AA412072 AA709241 H89332 BF445769 BF989466 BF989472 AA631105 AJ129915 W96362 AA515277 AA541513 L29222 AV758119 D82109 AL040956 BE244413 AV645640 BE246321 BE246314 D82116 AL036176 AA331779 AU100106 BE243857 AU076865 AW972327 AA497087 AJ887039 AW072798 AJ174455 AU156788 AA044401 AAD46086 BE244986 AJ634456 BE242945 BE242089 AU156034 BE244982 AL567955 BI005141 AA040426 AW630506 BF155668 AU118544 BG573573 W96436 AA373395 BE710347 AL564154 AJ708332 AA729530 N97229 AJ573015 T29655 H89333 H85847 AJ886473 AW189980 H02905 AJ811986 AU157753 W86829 AA020844 AU158204 AAD57356 AA283466 AA405504 AA017027 W94754 AA226498 W72391 H66461 C00442 H01925 B912232 U77534 U77537
60	406678	0_0	AK056270 AV706896 AJ692935 AJ681140 AW162481 AW087114 AW157019 AJ689795 AW251085 AW205911 BF438207 AW134945 BE041668 BF111425 U91641 NM_013305 BF968902 U55966 AU130750 BE174853 AJ929731 AW161524 R43753 BE779688
65	449092	4406_1	AJ002788 AL118666 AJ381600 BE672862 AW500520 BF223709 AW593740 AA262174 AA810597 AA810596 AA810595 F09382 BF976590 AW968002 AA262288 BF931698 AW968014 R18656 BM459356 AW794189 BF954184 Z42558 BF891641 BF963380 Z45874 F05187 X93079 BF742651 BF742649 R51324 D80031 BI457883 F06613 Z43128 F12243 BF950830 H19040 BF950829 F06439 R14947 F06702 R51037 R52173 R14953 R12174 R13610 H10426 R11851 T65264 R18737
70	436648	52977_1	U71456 AA482911 W78802 AW856538 BF3737212 N36809 N35320 AA282915 AW505512 AJ653832 W87891 AJ961530 T85904 H59397 R97278 W01059 AJ820532 T82391 AJ820501 T63226 R66056 R67840 AW961101 AA337499 W37181 AA180009 AW205862 AA988777 AA856975 BF172457 BG751124 AJ741346 AJ950344 AJ689062 AJ872193 AW102898 AW173586 AJ763273 AJ890387 AW150329 AJ762688 AA468892 AJ356394 AJ539642 AA642789 AJ950087 BF589902 N70208 AA283144 AA488964 H60052 R97040 BF886630 AW967677 AW971573 AW967671 AJ308119 AA251875 AA908598 AJ819225 AJ564269 AA908741 AA293273 AA969759 AW276905 AA044208 H83488 T92487
75	437938	66997_1	X69392 T24055
80	406623	0_0	

TABLE 53C.  
Pkcy:

Unique number corresponding to an Eos probeset



Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.

Strand: Indicates DNA strand from which exons were predicted.

NT\_position: Indicates nucleotide positions of predicted exons.

5	Pkey	Ref	Strand	NT_position
	405545	1054740	Plus	118677-118807,119091-119296,121626-12182
	401566	8469090	Minus	96277-96420,96979-97160
10	405547	1054740	Plus	124361-124520,124914-125050

TABLE 54A: ABOUT 161 GENES UPREGULATED IN PRIMARY MELANOMAS FROM TUMORS THAT LATER METASTASIZED RELATIVE TO PRIMARY MELANOMAS THAT DID NOT METASTASIZE LATER

Table 54A lists about 161 genes upregulated in primary melanomas from tumors that later metastasized relative to primary melanomas that did not metastasize later. These genes were selected from 59680 probesets on the Eos/Allymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigeneID: Unigene number

Unigene Title: Unigene gene title

R1: 90th percentile of AIs for primary melanomas that later metastasized divided by the 90th percentile of AIs for primary melanomas that did not metastasize later

R2: 90th percentile of AIs for primary melanomas that later metastasized divided by the 90th percentile of AIs for primary melanomas that did not metastasize later, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

25	Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
	448966	AW372914	Hs.86149	phosphoinositid 3-phosphate-binding prot	7.15	3.41
	413916	N49813	Hs.75615	apolipoprotein C-II	5.93	6.55
	414807	A1738616	Hs.77348	hydroxyprostaglandin dehydrogenase 15-(N	5.64	2.98
	415668	AW957684	Hs.306814	hypothetical protein FLJ21889	5.03	4.56
30	440274	R24595	Hs.7122	scrapie responsive protein 1	4.98	4.83
	417542	J04129	Hs.82269	progesterone-associated endometrial prota	4.96	7.07
	427882	AA640987	Hs.193767	ESTs	4.68	4.68
	452744	A1267652	Hs.246107	Homo sapiens mRNA: cDNA DKFZp434E082 (fr	4.29	3.06
	407907	A1752235	Hs.41270	procollagen-lysine, 2-oxoglutarate 5-dio	3.94	3.86
35	424410	W79027	Hs.271762	ESTs	3.67	3.19
	429083	Y09397	Hs.227817	BCL2-related protein A1	3.46	2.49
	407951	W77762	Hs.79015	antigen identified by monoclonal antibod	3.31	3.06
	428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	3.27	2.12
	440099	AI080058	Hs.6909	DKFZP564G202 protein	3.22	2.69
40	428001	H97428	Hs.219907	ESTs, Moderately similar to Transforming	3.20	1.85
	451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	3.18	4.61
	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	3.13	2.11
	430643	AW970065	Hs.287425	MEGF10 protein	3.10	3.31
	412262	W26406		seven in absentia (Drosophila) homolog 1	3.06	3.94
45	438328	A1492261	Hs.32450	ESTs	3.05	3.09
	409760	AA302840		gb:EST10534 Adipose tissue, white 1 Homo	3.01	2.65
	453912	AL121031		SWI/SNF related, matrix associated, acti	2.94	1.86
	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fs, clone PL	2.91	3.70
	407744	A8020629	Hs.38095	ATP-binding cassette, sub-family A (ABC1	2.88	2.53
50	453935	A1633770	Hs.42572	ESTs	2.88	2.00
	452689	F33868	Hs.284176	transferrin	2.84	6.47
	449550	AA353125	Hs.184721	ESTs	2.83	4.74
	409417	AA156247	Hs.104879	serine (or cysteine) proteinase inhibito	2.82	2.43
	438898	A1819863	Hs.106243	ESTs	2.81	2.08
55	430191	A1149880	Hs.188809	ESTs	2.80	2.69
	408418	AW963897	Hs.44743	KIAA1435 protein	2.79	1.75
	450157	AW961576	Hs.60178	ESTs	2.77	3.40
	420380	AA640891	Hs.102406	ESTs	2.77	4.28
60	443172	AW662964	Hs.199061	p300/CBP-associated factor	2.75	2.88
	456629	AW991965		histone deacetylase 3	2.72	2.24
	407857	A1928445	Hs.92254	synaptotagmin-like 2	2.72	1.93
	421097	A1280112	Hs.125232	Homo sapiens cDNA FLJ13266 fs, clone OV	2.68	2.59
	436280	A1690734		Homo sapiens cDNA: FLJ22562 fs, clone H	2.67	2.79
	407550	Y10515		gb:H.sapiens mRNA for CD58 T7 protein.	2.65	1.98
65	427871	AW992405	Hs.59622	Homo sapiens, clone IMAGE:3507281, mRNA,	2.64	1.76
	427899	AA829286	Hs.332053	serum amyloid A1	2.59	3.01
	442793	A1017798		ESTs, Weakly similar to T147_HUMAN CARGO	2.58	1.60
	446619	AU076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	2.57	1.91
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypotheti	2.57	2.13
70	458247	R14439	Hs.209194	ESTs	2.56	2.61
	451668	Z43948	Hs.326444	cartilage acidic protein 1	2.52	2.74
	433980	AA137152	Hs.286049	phosphoserine aminotransferase	2.51	1.88
	412719	AW016610	Hs.816	ESTs	2.50	1.68
	441789	D52059	Hs.7972	KIAA0871 protein	2.50	3.11
75	405885			Target Exon	2.50	3.15
	453464	A1884911	Hs.32989	receptor (calcitonin) activity modifying	2.48	3.33
	417821	BE245149	Hs.82643	protein tyrosine kinase 9	2.48	1.66
	450202	AW969756	Hs.34145	ESTs, Weakly similar to B49647 GTP-bind	2.47	2.79
	436825	AW341123	Hs.120275	ESTs	2.47	2.55
80	424762	AL119442	Hs.183684	eukaryotic translation initiation factor	2.42	2.28
	432426	AW973152	Hs.31050	ESTs	2.42	1.76
	409095	AW337272	Hs.293656	ESTs, Moderately similar to S72481 proba	2.41	2.41
	403752			NM_007753:Homo sapiens mitogen-activate	2.41	2.87



	404489		Target Exon	2.39	1.97
	411690	AA669253	RNA, U2 small nuclear	2.37	2.54
	439195	H89360	gb: yw28d08.s1 Morton Fetal Cochlea Homo	2.37	2.27
5	453582	AW854339	hypothetical protein FLJ11937	2.36	2.81
	438461	AW075485	phosphoserine aminotransferase	2.35	2.91
	432878	BE386490	Ptin	2.35	2.28
	416647	BE297139	replication protein A2 (32kd)	2.33	1.97
	428666	AL080190	Homo sapiens mRNA: cDNA DKFZp434A202 (fr	2.32	2.92
10	413645	AA130992	gb: z015e02.s1 Stralagene codon (937204)	2.31	2.63
	421282	AA286914	ESTs	2.31	1.85
	434418	AF134707	a disintegrin and metalloproteinase doma	2.31	2.21
	413204	BE071603	gb: QV3-BT0510-161299-032-r03 BT0510 Homo	2.31	1.49
	449720	AA311152	hypothetical protein FLJ21562	2.30	1.78
15	451838	AW005866	ESTs	2.28	2.05
	410943	AW968322	low molecular mass ubiquinone-binding pr	2.28	2.39
	459711	BE386801	trinucleotide repeat containing 3	2.27	2.39
	429489	AF008203	aristless-like homeobox 3	2.26	1.97
	429493	AL134708	ESTs	2.26	2.77
20	422283	AW411307	CDC45 (cell division cycle 45, S.cerevis	2.26	1.78
	441989	AA306207	protein kinase, cAMP-dependent, regulato	2.26	1.84
	419352	AI675008	ESTs	2.25	1.47
	427393	AB029018	KIAA1095 protein	2.25	1.83
	418522	AA605038	Homo sapiens cDNA: FLJ21950 fis, clone H	2.24	2.42
25	433468	AA832055	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.24	1.76
	452782	AA028156	ESTs	2.24	2.34
	443910	AW051711	ESTs	2.24	1.79
	408832	AW085690	ESTs, Weakly similar to Z195_HUMAN ZINC	2.22	1.52
	407283	T51008	gb: yb55e08.s1 Stralagene ovary (937217)	2.22	1.31
30	437376	AA749400	ESTs	2.22	2.44
	450712	AI732130	ESTs, Weakly similar to ALU8_HUMAN !!!	2.22	1.62
	412362	AK000050	hypothetical protein FLJ20043	2.22	2.36
	445183	AB007877	KIAA0417 gene product	2.20	1.84
	438501	Z44110	phosphoinositol 3-phosphate-binding prot	2.20	1.76
35	432882	NM_013257	serum/glucocorticoid regulated kinase-ii	2.19	1.59
	414900	AW452420	ESTs	2.18	1.89
	427704	AW971063	ESTs	2.17	1.86
	404942		splicing factor, arginine/serine-rich 9	2.17	1.86
	448019	AW947164	ESTs, Moderately similar to I38022 hypot	2.17	1.64
40	459254	AA694386	ESTs	2.16	1.61
	418965	AI002238	splicing factor, arginine/serine-rich 11	2.16	1.79
	443357	AW016773	low molecular mass ubiquinone-binding pr	2.16	2.32
	412432	AA126311	ESTs	2.15	2.73
	449567	AI990790	ESTs	2.08	2.85
45	433179	AW362945	ESTs	2.07	4.77
	408243	Y00787	interleukin 8	2.06	3.12
	435294	T84084	Homo sapiens cDNA FLJ11723 fis, clone HE	1.97	2.89
	449656	AA002008	ESTs	1.94	3.60
	412649	NM_002206	integrin, alpha 7	1.93	2.76
50	445162	AB011131	piccolo (presynaptic cytomatrix protein)	1.93	2.66
	419356	AI656166	hypothetical protein FLJ22316	1.92	3.39
	424263	M77640	L1 cell adhesion molecule (hydrocephalus	1.89	3.10
	414694	NM_015362	HSPC002 protein	1.88	4.25
	415825	Y18024	inositol 1,4,5-bisphosphate 3-kinase B	1.87	2.66
55	409105	AW467539	ESTs	1.87	2.96
	444784	D12485	ectonucleotide pyrophosphatase/phosphodi	1.85	2.80
	404149		C6002509*gi5031885 ref NP_005568.1  li	1.84	2.93
	406387		Target Exon	1.82	2.96
	420871	AA702972	ESTs	1.76	3.12
60	455797	BE091633	gb: IL2-BT0731-260400-076-F04 BT0731 Homo	1.75	3.12
	418751	BE389014	phosphoinositide-3-kinase, regulatory su	1.70	3.20
	412347	AW970026	ubiquinol-cytochrome c reductase hinge p	1.67	3.65
	413211	AW967107	hypothetical protein MG04365	1.66	2.89
	459317	BRCA1b	Eos Control	1.61	7.34
65	425525	AA358883	ESTs	1.59	2.67
	436823	AW749865	ESTs, Weakly similar to I38022 hypothe	1.56	2.76
	433669	AL047879	ESTs, Weakly similar to ALU2_HUMAN ALU S	1.55	2.76
	424389	AA339786	lymphocyte-specific protein 1	1.53	2.95
	426672	AW270555	hypothetical protein	1.51	3.39
70	415977	AL037622	methionine aminopeptidase; eIF-2-associa	1.47	2.65
	404780		Target Exon	1.43	2.77
	436476	AA326108	bHLH protein DEC2	1.41	3.04
	428284	AA535762	NM_004545 Homo sapiens NADH dehydrogenas	1.38	2.94
	448571	AA486794	ESTs, Weakly similar to 16.7Kd protein [	1.37	2.80
75	428156	BE269388	mitochondrial ribosomal protein L20	1.36	3.29
	447752	M73700	lactotransferrin	1.35	2.70
	447455	H38335	Homo sapiens mRNA for FLJ00058 protein,	1.35	3.03
	453281	W46280	ESTs, Weakly similar to A25704 synapsin	1.34	2.69
	413142	M81740	ornithine decarboxylase 1	1.33	2.96
80	407194	AA621644	gb: af54a01.s1 Soares_totat_fetus_Nb2HF8_	1.32	2.70
	444107	T46839	UDP glycosyltransferase 2 family, polype	1.26	3.27
	406797	AI432224	ribosomal protein L6	1.26	2.72
	406711	N25514	myosin, light polypeptide 6, alkali, smo	1.25	7.10
	414608	BE396215	ATP synthase, H transporting, mitochondr	1.24	2.72

401846			NM_000988*Homo sapiens ribosomal protei	1.24	2.82
432982	AA531058	Hs.182248	truncated calcium binding protein	1.23	3.10
428578	BE391797	Hs.343588	ribosomal protein S12	1.23	2.74
400199			Eos Control	1.21	3.58
400079			Eos Control	1.20	2.99
412623	R28898	Hs.74170	metallothionein 1E (functional)	1.19	2.63
406713	U02629	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.19	4.15
406712	M31212	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.18	4.75
442492	AA528489	Hs.234518	ribosomal protein L23	1.17	2.74
431526	Y10129	Hs.258742	myosin-binding protein C, cardiac	1.17	3.15
436398	H87136	Hs.5174	ribosomal protein S17	1.16	3.22
432205	A1806583	Hs.125291	ESTs	1.15	2.76
406859	A1581134	Hs.181357	laminin receptor 1 (67kD, ribosomal prot	1.09	2.66
401254			Target Exon	1.00	3.08
405752			Target Exon	1.00	2.87
445772	A1733941	Hs.145493	ESTs, Weakly similar to ALU7_HUMAN ALU S	1.00	2.70
452916	AA642831	Hs.31016	putative DNA binding protein	1.00	2.62
451411	AA017492	Hs.135655	EST	1.00	2.64
415658	BE501921	Hs.270471	ESTs	1.00	2.82
448610	NM_006157	Hs.21602	nel (chicken)-like 1	1.00	3.30

TABLE 54B:

Key: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

25	Key:	Unique Eos probeset identifier number
	CAT number:	Gene cluster number
	Accession:	Genbank accession numbers
30	Key:	Accession
	CAT Number	
	412262	4362_1
35	409760	865166_1
	453912	32562_3
40	456629	207_22
45		
50		
55		
60	436280	36296_1
	442793	417820_2
	411690	53926_1
65	439195	21979_1
	413645	1234345_1
	413204	1494523_1
	443357	427117_1
	455797	1511159_1
70	418751	21393_1
	424389	1059_4
75	406797	0_0

TABLE 54C:

Key: Unique number corresponding to an Eos probeset  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 N1\_position: Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
405885	7677703	Minus	42574-42998
403752	7678857	Plus	33704-33828
404489	8113772	Plus	98183-98480
404942	7382153	Plus	92095-92252
404149	7534008	Plus	121831-121951,124044-124150
406387	9256180	Plus	116229-116371,117512-117651
404780	9887810	Minus	175708-175871
401846	7712190	Minus	82775-82823,82912-83022
401254	9796309	Plus	152209-152383
405752	9212305	Plus	91392-91528

TABLE 55A: ABOUT 201 GENES UPREGULATED IN PRIMARY MELANOMAS FROM TUMORS THAT DID NOT METASTASIZE RELATIVE TO PRIMARY MELANOMAS THAT LATER METASTASIZED

Table 55A lists about 201 genes upregulated in primary melanomas from tumors that did not metastasize relative to primary melanomas that metastasized later. Genes were selected from 59680 probesets on the Eos/Allymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number  
ExAccon: Exemplar Accession number, Genbank accession number

UnigeneID: Unigene number

Unigene Title: Unigene gene title

R1: 90th percentile of AIs for primary melanomas that did not metastasize divided by the 90th percentile of AIs from primary melanomas that metastasized later

R2: 90th percentile of AIs for primary melanomas that did not metastasize divided by the 90th percentile of AIs from primary melanomas that metastasized later, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

Pkey	ExAccon	UnigeneID	Unigene Title	R1	R2
413554	AA319146	Hs.75426	secretogranin II (chromogranin C)	8.08	5.48
404854			Target Exon	5.18	8.18
406636	L12064		gb:Homo sapiens (clone WR4.12VL) am5-th	4.89	4.95
433435	BE545277	Hs.340959	Ts translation elongation factor, mitoch	4.83	4.86
408471	NM_012317	Hs.45231	leucine zipper, down-regulated in cancer	4.71	4.70
433658	L03678	Hs.156110	immunoglobulin kappa constant	4.71	3.85
412802	U41518	Hs.74602	aquaporin 1 (channel-forming integral pr	3.98	4.01
415801	R24219	Hs.278443	Fc fragment of IgG, low affinity Iib, re	3.92	3.35
400417	X72475		Target	3.83	2.78
419870	AW403911	Hs.266175	phosphoprotein associated with GEMs	3.67	2.29
409190	AU076538	Hs.50584	sarcoma amplified sequence	3.62	3.68
408692	AL040127	Hs.34074	dipeptidylpeptidase VI	3.61	3.89
423619	T48691	Hs.249159	adrenergic, alpha-2A-, receptor	3.56	3.61
442117	AW664964	Hs.128899	ESTs; hypothetical protein for IMAGE:447	3.55	2.85
445745	AB007924	Hs.13245	KIAA0455 gene product	3.38	2.55
406663	U24683		immunoglobulin heavy constant mu	3.34	6.16
414522	AW518944	Hs.76325	Immunoglobulin J chain	3.32	2.75
419235	AW470411	Hs.288433	neurotrophin	3.32	2.74
441598	AI733219	Hs.58262	ESTs	3.31	3.71
402294			Target Exon	3.24	2.35
402737			Target Exon	3.22	2.87
414135	NM_004419	Hs.2128	dual specificity phosphatase 5	3.20	3.04
410268	AA316181	Hs.61635	six transmembrane epithelial antigen of	3.18	2.81
427335	AA448542	Hs.251677	G antigen 7B	3.17	4.62
404995			ENSP00000251890*Monocytic leukemia zinc	3.13	2.34
430540	AW245422		Homo sapiens cDNA: FLJ22105 fos, clone H	3.12	2.21
430015	AW768399		ESTs	3.12	1.93
414340	AI022656	Hs.296272	ESTs	3.09	2.87
400072			Eos Control	3.08	3.16
422567	AF111178	Hs.118407	glypican 6	3.06	2.73
401284			Target Exon	3.04	2.56
455839	BE145814		gb:MR0-HT0208-101299-202-a04 HT0208 Homo	3.02	2.76
454027	R40192	Hs.21527	Human DNA sequence from clone GS1-115M3	3.00	3.15
437258	AL041243	Hs.174104	ESTs	2.99	2.44
445612	N94126	Hs.12969	hypothetical protein	2.98	2.40
417777	AI823763	Hs.7055	ESTs, Weakly similar to I78885 serine/th	2.97	2.13
437723	AI672731	Hs.13256	ESTs	2.95	2.46
439668	AI091277	Hs.302634	trizzled (Drosophila) homolog 8	2.95	2.77
424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	2.94	2.68
424761	AA534528	Hs.152944	loss of heterozygosity, 11, chromosomal	2.92	3.81
405757			Target Exon	2.92	3.00
406621	X57809	Hs.8997	immunoglobulin lambda locus	2.92	6.71
409060	AI815867	Hs.50130	neodin (mouse) homolog	2.86	2.16
431712	R26584	Hs.267993	hypothetical protein FLJ10143	2.82	2.50
413441	AI929374	Hs.75367	Src-like-adaptor	2.82	2.48
425651	AI218918	Hs.30209	KIAA0854 protein	2.82	1.13
422386	AF105374	Hs.115830	heparan sulfate (glucosamine) 3-O-sulfot	2.78	2.77
439778	AL109729	Hs.99364	putative transmembrane protein	2.77	1.92
434293	NM_004445	Hs.3796	EphB6	2.75	2.89
406642	AI245210		gb:Homo sapiens mRNA for immunoglobulin	2.70	2.03
406638	M13861		gb:Human T-cell receptor active beta-cha	2.69	2.67
432331	W37862	Hs.274368	MSTP032 protein	2.68	3.08
408989	AW361666	Hs.49500	KIAA0746 protein	2.68	2.58
401731			NM_017990*:Homo sapiens hypothetical pro	2.68	2.53
401979			C17000767:gi11990770[emb]CAC19651.1[ (A	2.68	3.42
415539	AI733881	Hs.72472	BMP-R1B	2.68	2.51

	425032	NM_001186	Hs.154275	BTB and CNC homology 1, basic leucine zi	2.67	2.13
	406837	R70292	Hs.156110	immunoglobulin kappa constant	2.66	3.25
	422550	BE297626	Hs.296049	microtubular-associated protein 4	2.66	2.74
	425100	AF051850	Hs.154567	supervillin	2.65	2.80
5	452933	AW391423	Hs.288555	Homo sapiens cDNA: FLJ22425 fs, clone H	2.65	2.63
	439706	AW872527	Hs.59761	ESTs, Weakly similar to DAPI_HUMAN DEATH	2.64	1.84
	447232	AW499834	Hs.327	interleukin 10 receptor, alpha	2.63	2.63
	425580	L11144	Hs.1907	galanin	2.62	2.00
	450680	AF131784	Hs.25318	Homo sapiens clone 25194 mRNA sequence	2.61	1.80
10	412482	AI499930	Hs.334885	mitochondrial GTP binding protein	2.61	1.82
	433470	AW960564		transmembrane 4 superfamily member 1	2.60	2.44
	419138	U48508	Hs.89631	ryanodine receptor 1 (skeletal)	2.60	2.47
	401112			NM_024997:Homo sapiens hypothetical pro	2.60	2.58
	411802	AA733204		nuclear transcription factor Y, gamma	2.59	2.32
15	407856	AA045281	Hs.266175	phosphoprotein associated with GEMs	2.59	1.88
	425209	AL049761	Hs.155140	casein kinase 2, alpha 1 polypeptide	2.58	2.81
	417165	R80137	Hs.302738	Homo sapiens cDNA: FLJ21425 fs, clone C	2.56	2.10
	442560	AA365042	Hs.325531	ESTs, Weakly similar to 2004399A chromos	2.55	3.97
	408491	AI088063	Hs.7882	ESTs	2.54	2.74
20	420223	N27807		ribosomal protein L4	2.54	2.02
	444467	AI150368	Hs.143844	ESTs	2.54	2.59
	436729	BE621807		transmembrane 4 superfamily member 1	2.53	2.29
	449217	AA278536	Hs.23262	ribonuclease, RNase A family, k6	2.53	1.80
	453507	AF083217	Hs.33085	WD repeat domain 3	2.52	1.99
25	420315	NM_006299	Hs.96448	zinc finger protein 193	2.52	2.50
	443060	D78874	Hs.8944	procollagen C-endopeptidase enhancer 2	2.50	2.35
	453500	AI478427	Hs.43125	esophageal cancer related gene 4 protein	2.50	2.44
	402692			Target Exon	2.50	1.73
	427792	M63928	Hs.180841	tumor necrosis factor receptor superfam	2.50	4.55
30	440065	W03476	Hs.266331	hypothetical protein MGC4595	2.49	2.95
	420568	F09247	Hs.247735	protocadherin alpha 10	2.49	3.55
	444115	AW954585	Hs.271920	ESTs, Weakly similar to Z195_HUMAN ZINC	2.49	2.52
	404049			NM_018937:Homo sapiens protocadherin be	2.48	2.67
	417694	R09486	Hs.193118	ESTs	2.48	2.09
35	420600	BE011657	Hs.165695	ESTs, Weakly similar to unnamed protein	2.48	2.00
	429922	Z97630	Hs.226117	H1 histone family, member 0	2.47	2.01
	404752			NM_024778:Homo sapiens hypothetical prot	2.47	3.07
	421429	NM_014922	Hs.104305	death effector filament-forming Ced-4-i	2.47	2.46
40	436378	AJ227874	Hs.99244	ESTs	2.46	1.88
	429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	2.44	2.98
	431190	AL134172	Hs.120852	ESTs	2.44	2.48
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	2.44	2.96
	436608	AA628980	Hs.192371	down syndrome critical region protein DS	2.44	3.16
45	445547	D86181	Hs.273	galactosylceramidase (Krabbe disease)	2.43	3.33
	443030	R68048	Hs.9238	hypothetical protein FLJ23516	2.43	2.07
	416908	AA333990	Hs.80424	coagulation factor XIII, A1 polypeptide	2.43	3.36
	406782	AA430373		gb:zw2011.1.s1 Soares ovary tumor NbHOT H	2.40	3.38
	407260	L09095		gb:Homo sapiens mRNA fragment	2.38	3.78
50	419556	U29615	Hs.91093	chitinase 1 (chitobiosidase)	2.36	3.56
	431365	AA504080	Hs.191958	immunoglobulin superfamily receptor tran	2.34	2.84
	414555	N98569	Hs.76422	phospholipase A2, group IIA (platelets,	2.33	3.21
	436485	X59135	Hs.156110	immunoglobulin kappa constant	2.31	2.94
	403632			Target Exon	2.27	2.80
55	434232	AW297064	Hs.131862	ESTs	2.24	2.98
	428114	AI821548	Hs.98363	ESTs, Weakly similar to I38022 hypotheti	2.23	2.81
	403294			Target Exon	2.19	2.81
	429249	X81479	Hs.2375	egl-like module containing, mucin-like,	2.16	3.13
	403295			Target Exon	2.15	2.95
60	427817	AA503373	Hs.186678	ESTs	2.13	2.80
	425154	NM_001851	Hs.154850	collagen, type IX, alpha 1	2.08	3.28
	443176	AI696081	Hs.223770	ESTs	2.04	3.50
	401770			C17001738:gi 2327052 gb AAC48759.1  (U9	2.04	5.39
	407124	R08160		gb:yf18a07.s1 Soares fetal liver spleen	2.03	2.95
65	456060	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fs, clone MA	2.03	2.97
	413053	AW963263	Hs.65377	ESTs, Moderately similar to KIAA1399 pro	2.01	3.42
	426653	AA530892	Hs.171695	dual specificity phosphatase 1	2.01	3.05
	410677	NM_003278	Hs.65424	tetranectin (plasminogen-binding protein	2.01	3.58
	401673			C16001416:gi 12743112 ref XP_010131.2	1.99	4.99
70	420983	W95228	Hs.100764	cathepsin G	1.95	5.47
	413624	BE177019	Hs.75445	SPARC-like 1 (mast9, hevii)	1.94	4.58
	433554	AW957666	Hs.8108	disabled (Drosophila) homolog 1	1.93	2.82
	405121			mitogen-activated protein kinase 8 inter	1.92	2.82
	436456	AW292677	Hs.248122	G protein-coupled receptor 24	1.92	2.80
75	450852	AI983354	Hs.7740	oxysterol binding protein-like 1	1.91	5.08
	432902	U75697		histone deacetylase 3	1.90	2.84
	422100	AI096988	Hs.111554	ADP-ribosylation factor-like 7	1.89	3.04
	420162	BE378432	Hs.95577	cyclin-dependent kinase 4	1.87	2.85
	424398	BE397787	Hs.145393	homocysteine-inducible, endoplasmic reti	1.85	3.71
	416714	AF283770	Hs.79630	CD79A antigen (immunoglobulin-associated	1.85	3.38
80	433465	AV657778	Hs.3314	selenoprotein P, plasma, 1	1.85	3.57
	447990	BE048821	Hs.20144	small inducible cytokine subfamily A (Cy	1.82	6.17
	421563	NM_006433	Hs.105806	granulysin	1.80	3.50
	453804	AA300204	Hs.35276	KIAA0852 protein	1.78	2.87

	429412	NM_006235	Hs.2407	POU domain, class 2, associating factor	1.78	3.54
	437866	AA156781		metallothionein 1E (functional)	1.77	2.97
	427751	AF000152		conserved gene amplified in osteosarcoma	1.75	6.89
	400442			DKFZP586G1722 protein	1.74	3.60
5	456898	NM_001928	Hs.155597	D component of complement (adipsin)	1.74	3.45
	414477	U41635	Hs.76228	amplified in osteosarcoma	1.71	4.99
	432870	AW974124		gb:EST386227 MAGE resequences, MAGM Homo	1.68	2.86
	456642	AW451623	Hs.109752	putative c-Myc-responsive	1.68	3.09
	456694	AW016382	Hs.105642	Homo sapiens cDNA: FLJ23271 fs, clone H	1.66	2.83
10	430449	AA352723	Hs.241471	RNB6	1.65	2.84
	401029			v-myc avian myelocytomatosis viral retai	1.65	2.88
	402742			NM_002508:Homo sapiens nidogen (enactin)	1.64	3.37
	402559			Rho GTPase activating protein 1	1.63	3.07
	418271	NM_000919	Hs.83920	peptidylglycine alpha-amidating monooxyc	1.62	3.11
15	406851	AA609784		major histocompatibility complex, class	1.62	2.86
	450912	AW939251	Hs.25647	v-fos FBJ murine osteosarcoma viral onco	1.60	3.94
	447029	AL137281	Hs.17110	Homo sapiens mRNA: cDNA DKFZp434C2016 (f	1.60	3.75
	417739	Z43995		gb:HSC1Q8121 normalized infant brain cDN	1.59	2.96
	452950	AA428123	Hs.302766	tyrosine 3-monooxygenase/tryptophan 5-mo	1.58	2.95
20	427461	AA531527	Hs.332040	hypothetical protein MGCI3010	1.58	4.11
	444182	AW160432	Hs.296460	craniofacial development protein 1	1.57	2.98
	407815	AW373860	Hs.183860	hypothetical protein FLJ20277	1.57	3.88
	452887	A1702223	Hs.107253	hypothetical protein DKFZp761F241	1.56	2.88
25	416819	U77735	Hs.80205	pim-2 oncogene	1.56	3.59
	414583	AA362907	Hs.76494	proline arginine-rich end leucine-rich r	1.56	4.38
	426104	A1204418	Hs.190080	ESTs	1.55	3.47
	441591	AF055992	Hs.183	Duffy blood group	1.52	4.28
	446406	A1553581		Arg/Abt-interacting protein ArgBP2	1.49	2.87
30	427343	A1880044	Hs.176977	protein kinase C binding protein 2	1.49	2.88
	415550	L13720	Hs.78501	growth arrest-specific 6	1.47	4.82
	411961	A478432	Hs.72956	hypermethylated in cancer 1	1.46	3.48
	406213			ENSP00000204207:DJ63M2.2 (similar to AC	1.42	3.19
	400847			NM_003105:Homo sapiens sortilin-related	1.41	2.97
35	404542			NM_021965:Homo sapiens phosphoglucomuta	1.40	3.02
	452650	AW270150	Hs.254516	ESTs	1.40	2.86
	432894	AW167668	Hs.279772	brain specific protein	1.37	5.52
	404030			NM_015669:Homo sapiens protocadherin be	1.37	3.03
	422033	AW245805	Hs.110903	claudin 5 (transmembrane protein deleted	1.35	3.15
40	413762	AW411479	Hs.848	FK506-binding protein 4 (59kD)	1.34	3.09
	425367	BE271188	Hs.155975	protein tyrosine phosphatase, receptor t	1.32	3.29
	415198	AW009480	Hs.943	natural killer cell transcript 4	1.32	2.89
	406908	Z25437		gb:H.sapiens protein-tyrosine kinase gen	1.31	2.89
	423959	AA333025		gb:EST37122 Embryo, 8 week I Homo sapien	1.31	2.88
45	408135	AA317248	Hs.42957	methyltransferase-like 1	1.29	3.81
	427523	BE242779	Hs.179526	upregulated by 1,25-dihydroxyvitamin D-3	1.29	3.25
	415512	Y16270	Hs.78482	paralemmin	1.29	2.85
	413531	AL036958	Hs.75416	DAZ associated protein 2	1.28	3.06
	419608	AL037237	Hs.91586	transmembrane 9 superfamily member 1	1.27	2.80
50	424614	X54486	Hs.151242	serine (or cysteine) proteinase inhibito	1.26	2.90
	422934	BE244189	Hs.122492	hypothetical protein	1.25	3.41
	450935	BE514743		tumor suppressor deleted in oral cancer-	1.25	3.63
	416630	H69392	Hs.174051	small nuclear ribonucleoprotein 70kD pol	1.24	2.93
	416950	AL049798	Hs.80552	dermatopontin	1.22	2.81
55	412558	AW962019		gb:EST374092 MAGE resequences, MAGG Homo	1.21	3.02
	419593	W73092	Hs.58282	ESTs	1.19	2.84
	403470			Target Exon	1.14	2.82
	402230			Fgenesh predicted: CYTOCHROME P450 4F5 (	1.12	2.96
	400559			Target Exon	1.00	2.90
60	412695	AW584439		gb:PM3-HN0011-220300-002-c05 HN0011 Homo	1.00	2.84
	427072	H38046	Hs.293981	ESTs	1.00	2.89
	430439	AL133561		DKFZP434B061 protein	1.00	3.09
	418183	NM_001772	Hs.83731	CD33 antigen (gp67)	1.00	2.93

TABLE 558:

Pkey: Unique Eos probeset identifier number  
CAT number: Gene cluster number  
Accession: Genbank accession numbers

70	Pkey	CAT Number	Accession
	406636	0_0	L12064 L12083 L12065 L12075 L12066 L12085 L12072 L12082 L12081 L12062 L12080
	430540	713_2	BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474865 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418
			BM045810 AU120387 BG770238 BG686740 BG913323 B1759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847
			A1770171 BF196861 BE856897 AA463876 A1375927 AA648810 AA948193 AA490916 AA459893 AA458188 AU240408 AU191843 AU131029 AW768399
			A1365196 AW337984 AW026150 BE466591 BE674599 A1818438 AA772197 A1651927 AW151143 B1198825 BG819083 BM458764 BE903567
75			BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610
			BE561530 BE560537 BE903782 BE732947 B1227204 BG761305 BE262642 BE391848 BE382475 BG008258 B1547991 B1459099 BE391391 BE259420
			BE298109 AW245422 A1423847 A914618 H80534 BE301004 AL531791 A1435581 BF793112 AL577303 AA373265 BE746965 BF743630 BE879296
			A359493 BM018598 A1689260 AW072450 F20201 AW151405 AW517572 AA773468 BG259694 BE391163 BG621529 AU241728 BG767231 BM462953
			BG340524 W52648 AA113434 BE785431 B1041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 B1091658 N72512
80			W58732 W85690 BG958989 A1205206 H19721 W17051 W77958 B1262010 AA844319 W74143 W72214 N85194 BE734033 BG164099 AA931069
			F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 A1027722 A1150356 AA886395 AW977627 BE220225 AA884082 AW518114
			A1243844 AA809493 AA481029 AA825718 A1347866 A1331670 AA814436 A1251109 R07704 AA765606 AA724593 A1918399 A1537550 AA491103

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TABLE 56A: ABOUT 277 GENES UPREGULATED IN MELANOMA METASTASES RELATIVE TO BENIGN NEVI

Table 56A lists about 277 genes upregulated in melanoma metastases relative to benign nevi. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

5	Key:	Unique Eos probeset identifier number			
	ExAccn:	Exemplar Accession number, Genbank accession number			
	UnigeneID:	Unigene number			
	Unigene Title:	Unigene gene title			
10	R1:	70th percentile of melanoma metastasis AIs divided by the maximum of benign nevi AIs			
	R2:	70th percentile of melanoma metastasis AIs divided by the maximum of benign nevi AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator			
	Key	ExAccn	UnigeneID	Unigene Title	R1 R2
15	422424	AI186431	Hs.296638	prostate differentiation factor	13.73 17.18
	446619	AJ076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	11.67 13.25
	407846	AA426202	Hs.40403	Obp300-interacting transactivator, wit	9.35 8.75
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypotheti	8.63 6.22
	417880	BE241595	Hs.82848	selectin L (lymphocyte adhesion molecule	8.21 8.65
20	424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	7.13 5.04
	447210	AF035269	Hs.17752	phosphatidylserine-specific phospholipas	6.79 7.12
	417693	AW959741	Hs.40368	adaptor-related protein complex 1, sigma	6.55 5.94
	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytotoxin)	6.43 3.46
	414812	X72755	Hs.77367	monokine induced by gamma interferon	6.43 5.44
25	451736	AW080356	Hs.23889	ESTs, Weakly similar to ALU7_HUMAN ALU S	6.31 6.08
	418870	AF147204	Hs.89414	chemokine (C-X-C motif), receptor 4 (fus	6.20 6.04
	428291	AA534009	Hs.183487	interferon stimulated gene (20kD)	6.03 4.72
	417308	H50720	Hs.81892	KIAA0101 gene product	6.01 7.07
	448569	BE382657	Hs.21486	signal transducer and activator of trans	5.99 8.88
30	439310	AF086120	Hs.102793	ESTs	5.95 6.63
	452838	U65011	Hs.30743	preferentially expressed antigen in mela	5.95 3.77
	422241	Y00062	Hs.170121	protein tyrosine phosphatase, receptor t	5.76 6.37
	442379	NM_004613	Hs.8265	transglutaminase 2 (C polypeptide, prote	5.76 3.14
	409274	NM_003930	Hs.52644	SKAP55 homologue	5.65 5.01
35	442739	NM_007274	Hs.8679	cytosolic acyl coenzyme A thioester hydr	5.58 3.50
	442711	AF151073	Hs.8845	hypothetical protein	5.45 5.84
	425118	AU076611	Hs.154672	methylene tetrahydrofolate dehydrogenase	5.42 5.75
	412918	BE563957		activated RNA polymerase II transcriptio	5.35 4.94
	428125	AA393071	Hs.182579	leucine aminopeptidase	5.33 5.34
40	446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	5.33 4.98
	431183	NM_006855	Hs.250696	KDEL (Lys-Asp-Glu-Leu) endoplasmic retic	5.30 6.25
	414219	W20010	Hs.75823	ALL1-fused gene from chromosome 1q	5.16 5.33
	426600	NM_003378	Hs.171014	VEGF nerve growth factor inducible	5.05 8.77
	415444	BE247295	Hs.78452	solute carrier family 20 (phosphate tran	5.03 5.17
45	436701	AW959032		ESTs, Moderately similar to 178885 serin	5.03 4.17
	406648	AA563730	Hs.277477	major histocompatibility complex, class	4.99 5.08
	410850	AW362867	Hs.302738	Homo sapiens cDNA: FLJ21425 fis, clone C	4.98 4.71
	418299	AA279530	Hs.83968	integrin, beta 2 (antigen CD18 (p95), ly	4.98 4.08
	432469	AL080084		CGI-100 protein	4.97 4.70
50	404854			Target Exon	4.85 4.07
	415701	NM_003878	Hs.78619	gamma-glutamyl hydrolase (conjugase, fol	4.82 4.90
	425397	J04088	Hs.156346	topoisomerase (DNA) II alpha (170kD)	4.81 3.45
	408958	T99607	Hs.49346	signal recognition particle 54kD	4.78 2.34
	453949	AU077146	Hs.36927	heat shock 105kD	4.78 6.32
55	450879	AJ796870	Hs.54277	DNA segment on chromosome X (unique) 992	4.77 6.57
	440245	AK001913	Hs.7100	hypothetical protein	4.74 3.83
	412228	AW503785	Hs.73792	complement component (3d/Epstein Barr vi	4.74 5.53
	417834	BE172058	Hs.82689	tumor rejection antigen (gp96) 1	4.73 4.35
	451003	AF058696	Hs.25812	Nijmegen breakage syndrome 1 (nibrin)	4.67 4.60
60	424571	BE379766		polymerase (RNA) II (DNA directed) polyp	4.62 3.50
	434203	BE262677	Hs.283558	hypothetical protein PRO1855	4.61 5.67
	452268	NM_003512	Hs.28777	H2A histone family, member L	4.60 3.79
	421311	N71848	Hs.283609	hypothetical protein PRO2032	4.60 3.58
	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA sequence	4.60 4.68
65	425706	AW406678	Hs.122559	hypothetical protein FLJ22570	4.59 3.83
	450293	N36754	Hs.171118	hypothetical protein FLJ00026	4.57 5.40
	406836	AW514501	Hs.156110	immunoglobulin kappa constant	4.57 6.33
	413441	AI929374	Hs.75367	Src-like-adapter	4.53 4.77
70	431129	AL137751	Hs.263671	Homo sapiens mRNA: cDNA DKFZp43410812 (I	4.48 4.89
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	4.47 4.17
	411060	NM_006074	Hs.318501	Homo sapiens mRNA full length insert cDN	4.47 4.33
	417501	AL041219	Hs.82222	sema domain, immunoglobulin domain (Ig),	4.45 3.32
	437763	AA469369	Hs.5831	tissue inhibitor of metalloproteinase 1	4.43 4.43
	448883	BE614989	Hs.7503	hypothetical protein FLJ14153	4.42 3.91
75	417274	N92036	Hs.81848	RAD21 (S. pombe) homolog	4.41 4.09
	419285	D31887	Hs.89858	KIAA0062 protein	4.40 3.56
	418321	D63477	Hs.84087	KIAA0143 protein	4.38 3.00
	430154	AW583058	Hs.234726	serine (or cysteine) proteinase inhibito	4.37 4.26
	428450	NM_014791	Hs.184339	KIAA0175 gene product	4.36 4.90
80	428297	AA236291	Hs.183583	serine (or cysteine) proteinase inhibito	4.36 3.57
	447232	AW499834	Hs.327	interleukin 10 receptor, alpha	4.36 4.07
	409598	NM_014018	Hs.55097	mitochondrial ribosomal protein S28	4.35 3.29
	442432	BE093589	Hs.38178	hypothetical protein FLJ23468	4.34 5.80
	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	4.33 3.51



443991	NM_002250	Hs.10082	potassium intermediate/small conductance	4.33	4.23
452322	BE566343	Hs.28988	glutaredoxin (thioltransferase)	4.32	2.68
420991	AW504814	Hs.287379	Homo sapiens mRNA for FLJ001111 protein,	4.32	4.54
449722	BE280074	Hs.23960	cyclin B1	4.31	3.73
408380	AF123050	Hs.44532	diubiquitin	4.30	5.74
427127	AW802282	Hs.22265	pyruvate dehydrogenase phosphatase	4.28	4.80
417933	X02308	Hs.82962	thymidylate synthetase	4.28	3.59
432828	AB042326	Hs.287402	chondroitin 4-sulfotransferase	4.25	4.15
450306	AL080080	Hs.24766	thioredoxin domain-containing	4.24	3.15
440266	AA088809	Hs.19525	hypothetical protein FLJ22794	4.23	4.12
407951	W77762	Hs.79015	antigen identified by monoclonal antibod	4.22	4.64
427337	246223	Hs.176663	Fc fragment of IgG, low affinity IIb, r	4.20	4.62
408989	AW361666	Hs.49500	KIAA0746 protein	4.20	4.92
449626	AA774247	Hs.301637	zinc finger protein 258	4.19	3.17
422846	BE513934	Hs.1583	neutrophil cytosolic factor 1 (47kD, chr	4.18	8.91
415726	T89844	Hs.78712	aminolevulinatase, delta-, synthase 1	4.16	4.21
444207	A1565004		cathepsin D (lysosomal aspartyl protease	4.16	1.89
416980	AA381133	Hs.80684	high-mobility group (nonhistone chromoso	4.14	3.30
438718	AL040058	Hs.6375	uncharacterized hypothalamus protein HT0	4.14	3.04
437802	AA75995	Hs.122910	ESTs	4.12	5.13
446392	AF142419	Hs.15020	homolog of mouse quaking Cdk (KH domain	4.12	3.87
409461	AA382169	Hs.54483	N-myc (and STAT) interactor	4.11	4.96
427247	AW504221	Hs.174103	integrin, alpha L (antigen CD11A (p180),	4.11	6.37
414359	M62194	Hs.75929	cadherin 11, type 2, OB-cadherin (osteob	4.10	4.16
450071	AA018283	Hs.24359	Homo sapiens cDNA FLJ111174 fs, clone PL	4.10	2.35
452882	AW972990	Hs.196270	folate transporter/carrier	4.10	4.50
414522	AW518944	Hs.76325	immunoglobulin J chain	4.09	6.07
407756	AA116021	Hs.38260	ubiquitin specific protease 18	4.09	5.03
405506			Target Exon	4.08	3.71
417497	AW402482	Hs.82212	CD53 antigen	4.07	8.61
413715	AW851121	Hs.75497	Homo sapiens cDNA: FLJ22139 fs, clone H	4.06	4.05
421508	NM_004833	Hs.105115	absent in melanoma 2	4.05	4.61
445701	AF055581	Hs.13131	lymphocyte adaptor protein	4.02	4.56
443071	AL080021	Hs.8986	complement component 1, q subcomponent,	4.00	8.91
417615	BE548641	Hs.82314	hypoxanthine phosphoribosyltransferase 1	3.99	4.15
444371	BE540274	Hs.239	forkhead box M1	3.88	4.58
450515	AW304226		biphenyl hydrolase-like (serine hydrolas	3.85	4.26
446506	A123118	Hs.15159	chemokine-like factor, alternatively spl	3.81	4.06
410668	BE379794	Hs.159651	hypothetical protein	3.80	6.84
443710	A1928136	Hs.9691	Homo sapiens cDNA: FLJ23249 fs, clone C	3.77	4.46
406837	R70292	Hs.156110	immunoglobulin kappa constant	3.77	6.44
419381	AB023420	Hs.90093	heat shock 70kD protein 4	3.76	4.00
402474			NM_004079:Homo sapiens cathepsin S (CTSS	3.76	4.67
454080	A1199711	Hs.576	fucosidase, alpha-L-, tissue	3.74	6.22
409264	NM_014937	Hs.52463	KIAA0966 protein	3.69	4.36
428398	A1249368	Hs.98558	ESTs	3.68	5.18
423494	AW504365	Hs.24143	Wiskott-Aldrich syndrome protein interac	3.67	4.12
414829	AA321568	Hs.77436	pleckstrin	3.65	4.45
437239	AW503395	Hs.5541	ATPase, Ca transporting, ubiquitous	3.63	4.84
433867	AK000596	Hs.3618	hippocampin-like 1	3.59	4.49
432485	N90866	Hs.276770	CDW52 antigen (CAMPATH-1 antigen)	3.54	5.31
418310	AA814100	Hs.86693	ESTs	3.49	4.57
406868	AA505445	Hs.300697	immunoglobulin heavy constant gamma 3 (G	3.48	4.33
438746	A1885815	Hs.184727	Human melanoma-associated antigen p97 (m	3.47	6.87
427527	A1809057	Hs.153261	immunoglobulin heavy constant mu	3.44	10.42
442485	BE092285	Hs.29724	hypothetical protein FLJ13187	3.41	4.60
432606	NM_002104	Hs.3066	granzyme K (serine protease, granzyme 3;	3.40	4.50
435080	A1831760	Hs.155111	hypothetical protein FLJ14428	3.40	4.22
436810	AA353044	Hs.5321	ARP3 (actin-related protein 3, yeast) ho	3.40	5.03
422545	X02761	Hs.287820	fibronectin 1	3.39	7.32
409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromoso	3.36	4.47
434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	3.34	5.02
416975	NM_004131	Hs.1051	granzyme B (granzyme 2, cytotoxic T-lymp	3.34	4.24
448410	AK000227	Hs.21126	hypothetical protein FLJ20220	3.33	4.29
432642	BE297635	Hs.3069	heat shock 70kD protein 9B (mortalin-2)	3.32	4.48
425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypothe	3.24	4.64
443623	AA345519	Hs.9641	complement component 1, q subcomponent,	3.23	13.58
426490	NM_001621	Hs.170087	aryl hydrocarbon receptor	3.23	4.20
443958	BE241880	Hs.10029	cathepsin C	3.16	5.05
407862	BE548267	Hs.337986	Homo sapiens cDNA FLJ10934 fs, clone OV	3.15	4.04
412577	222968	Hs.74076	CD163 antigen	3.14	5.32
414050	NM_004766	Hs.75724	coatamer protein complex, subunit beta 2	3.13	4.65
442904	AW575008	Hs.11355	thymopoietin	3.13	4.34
421633	AF121860	Hs.106260	sorting nexin 10	3.12	4.99
413936	AF113676	Hs.297681	serine (or cysteine) proteinase inhibito	3.11	5.47
428797	AA496205	Hs.193700	Homo sapiens mRNA; cDNA DKF Zp58610324 (f	3.10	4.30
408515	A1289507	Hs.299883	hypothetical protein FLJ23399	3.10	4.03
409442	AA310162	Hs.169248	cytochrome c	3.07	4.00
456373	BE247706	Hs.89751	membrane-spanning 4-domains, subfamily A	3.04	4.38
430413	AW842182	Hs.241392	small inducible cytokine A5 (RANTES)	3.04	5.53
418526	BE019020	Hs.85838	solute carrier family 16 (monocarboxylic	3.03	4.97
452139	AA099969	Hs.16331	Homo sapiens cDNA: FLJ21482 fs, clone C	3.01	4.87
430478	NM_014349	Hs.241535	apolipoprotein L 3	2.98	4.44

5	439237	AW408158	Hs.318893	ESTs, Weakly similar to A47582 B-cell gr	2.95	7.45
	406782	AA430373		gbrzw2011.s1 Soares ovary tumor NbtHOT H	2.93	8.49
	450455	AL117424	Hs.250335	chloride intracellular channel 4	2.90	5.08
	422530	AW972300	Hs.118110	bone marrow stromal cell antigen 2	2.87	7.07
	429490	AI971131	Hs.23889	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.87	4.29
	410231	AA314163	Hs.61153	proteasome (prosome, macropain) 26S subu	2.82	5.53
	419956	AL137939	Hs.40096	cadherin 19, type 2	2.80	4.26
	416511	NM_006762	Hs.79356	Lysosomal-associated multispinning membr	2.79	5.55
10	421712	AK000140	Hs.107139	hypothetical protein	2.79	6.29
	429732	U20158	Hs.2488	lymphocyte cytosolic protein 2 (SH2 doma	2.78	4.74
	448517	AA082750	Hs.42194	hypothetical protein FLJ22649 similar to	2.78	4.69
	427792	MG3928	Hs.180841	tumor necrosis factor receptor superfam	2.77	5.18
	446272	BE268912	Hs.14601	hematopoietic cell-specific Lyn substrat	2.75	4.90
	422173	BE385828	Hs.250619	phorbol-in-like protein MDS019 (CEM15)	2.75	4.33
15	446566	H95741	Hs.17914	membrane-spanning 4-domains, subfamily A	2.72	4.19
	429402	AF116571	Hs.201671	SRY (sex determining region Y)-box 13	2.72	5.15
	421360	AA297012	Hs.103839	erythrocyte membrane protein band 4.1-li	2.71	4.82
	425762	BE244076	Hs.159578	AT-hook transcription factor AKNA	2.71	4.61
20	429412	NM_006235	Hs.2407	POU domain, class 2, associating factor	2.69	4.45
	409202	AA236881	Hs.51043	hexosaminidase B (beta polypeptide)	2.68	4.89
	426124	AI263899	Hs.250697	phosphatidylinositol glycan, class F	2.68	4.25
	422672	X12784	Hs.119129	collagen, type IV, alpha 1	2.67	5.00
	417389	BE260564	Hs.82045	midkine (neurile growth-promoting factor	2.65	9.54
	445784	AI253155	Hs.146065	ESTs	2.65	4.11
25	410341	AW499985	Hs.42915	ARP2 (actin-related protein 2, yeast) ho	2.64	4.50
	422603	BE242587	Hs.118651	hematopoietically expressed homeobox	2.63	4.17
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	2.62	5.80
	410016	AA297977	Hs.57907	small inducible cytokine subfamily A (Cy	2.61	5.57
30	424779	AL046851	Hs.153053	CD37 antigen	2.60	5.72
	420224	M84371	Hs.96023	CD19 antigen	2.60	4.02
	421924	BE514514	Hs.109606	coronin, actin-binding protein, 1A	2.57	4.83
	426143	BE379836		proteasome (prosome, macropain) subunit,	2.56	4.50
	421563	NM_006433	Hs.105806	granulysin	2.56	5.35
35	425593	AA278921	Hs.1908	proteoglycan 1, secretory granule	2.55	4.32
	428169	AI928984	Hs.182793	golgi phosphoprotein 2	2.54	5.78
	417022	NM_014737	Hs.80905	Ras association (RalGDS/AF-6) domain fam	2.54	4.09
	414646	AA353776	Hs.901	CD48 antigen (B-cell membrane protein)	2.53	4.41
	429800	AA333375	Hs.223014	antizyme inhibitor	2.50	5.68
40	407241	M34516		gb:Human omega light chain protein 14.1	2.50	4.69
	421739	AB004550	Hs.107526	UDP-Gal:beta-GlcNAc:beta 1,4-galactosylt	2.45	4.35
	412819	T25829	Hs.24048	FK506 binding protein precursor	2.45	4.66
	435523	T62849	Hs.11090	membrane-spanning 4-domains, subfamily A	2.44	4.91
	434883	AW381538	Hs.19807	hypothetical protein MGC12559	2.41	4.80
45	420340	NM_000734	Hs.97087	CD32 antigen, zeta polypeptide (TiT3 com	2.41	4.00
	449296	AL137257	Hs.23458	Homo sapiens cDNA: FLJ23015 fis, clone L	2.41	4.77
	417370	T28651	Hs.82030	tryptophanyl-tRNA synthetase	2.41	4.04
	400223			Eos Control	2.39	5.47
50	431629	AU077025	Hs.265827	interferon, alpha-inducible protein (clo	2.38	7.67
	414622	AI752666	Hs.76669	nicotinamide N-methyltransferase	2.38	5.32
	415149	X12451	Hs.78056	cathepsin L	2.37	8.07
	435099	AC004770	Hs.4756	flap structure-specific endonuclease 1	2.37	5.23
	454390	AB020713	Hs.56966	KIAA0906 protein	2.35	4.57
	427407	BE268649	Hs.177766	ADP-ribosyltransferase (NAD; poly (ADP-r	2.31	5.48
55	449029	N28989	Hs.22891	solute carrier family 7 (cationic amino	2.24	4.08
	438956	W00847	Hs.135056	Human DNA sequence from clone RPS-850E9	2.23	4.02
	423397	NM_001838	Hs.1652	chemokine (C-C motif) receptor 7	2.23	4.90
	416232	AW502678	Hs.79090	exportin 1 (CRM1, yeast, homolog)	2.18	4.97
	436692	AW243158	Hs.5297	DKFZP564A2416 protein	2.17	4.13
60	420842	AI083668	Hs.50601	hypothetical protein MGC10986	2.14	5.14
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	2.13	4.43
	429642	X68264	Hs.211579	melanoma cell adhesion molecule (MCAM) (	2.11	5.42
	416448	L13210	Hs.79339	lectin, galactoside-binding, soluble, 3	2.10	6.36
	416714	AF283770	Hs.79630	CD79A antigen (immunoglobulin-associated	2.10	4.06
	409220	BE243323	Hs.51233	tumor necrosis factor receptor superfam	2.09	4.67
65	414045	NM_002951	Hs.75722	ribophorin II	2.07	4.32
	422451	AA310753	Hs.42491	ESTs, Weakly similar to S65657 alpha-1C-	2.07	4.24
	441211	AW946155	Hs.7750	hypothetical protein AL133206	2.06	4.64
	434692	H06586	Hs.94	DnaJ (Hsp40) homolog, subfamily A, membe	2.05	4.33
70	452363	AI582743	Hs.94953	Homo sapiens, Similar to complement comp	2.04	13.36
	438393	AA351815	Hs.50740	Homo sapiens cDNA: FLJ22272 fis, clone H	2.03	4.52
	413313	NM_002047	Hs.283108	glycyl-tRNA synthetase	2.02	4.11
	452700	AI859390	Hs.288940	five-span transmembrane protein M83	2.00	4.04
	406621	X57809	Hs.8997	immunoglobulin lambda locus	1.99	4.35
75	424415	NM_001975	Hs.146580	enolase 2, (gamma, neuronal)	1.98	4.52
	429451	BE409861	Hs.202833	heme oxygenase (decycling) 1	1.95	5.60
	416967	BE616731	Hs.80645	interferon regulatory factor 1	1.95	5.38
	414945	BE076358	Hs.77667	lymphocyte antigen 6 complex, locus E	1.93	4.69
	418917	X02994	Hs.1217	adenosine deaminase	1.91	4.32
	445411	AL137255	Hs.12646	hypothetical protein FLJ22693	1.91	4.48
80	413945	NM_000591	Hs.75627	CD14 antigen	1.90	6.03
	429119	AV660012	Hs.196437	hypothetical protein FLJ10788	1.90	4.08
	413317	U53225	Hs.75283	sorting nexin 1	1.89	4.06
	427239	BE270447		ubiquitin carrier protein	1.87	5.98

450440	AB024334	Hs.25001	tyrosine 3-monooxygenase/tryptophan 5-mo	1.87	6.33
413142	M81740	Hs.75212	ornithine decarboxylase 1	1.85	4.21
447131	NM_004585	Hs.17466	retinoic acid receptor responder (tazaro	1.84	5.07
430040	AW503115	Hs.227823	p45 protein	1.83	5.57
415819	U77735	Hs.80205	pim-2 oncogene	1.83	4.12
425356	BE244879	Hs.155939	inositol polyphosphate-5-phosphatase, 14	1.82	5.71
414570	Y00285	Hs.76473	insulin-like growth factor 2 receptor	1.81	4.73
443639	BE269042	Hs.9661	proteasome (prosome, macropain) subunit,	1.80	4.71
418707	U97502	Hs.87497	butyrophilin, subfamily 3, member A2	1.78	5.16
425367	BE271188	Hs.155975	protein tyrosine phosphatase, receptor I	1.78	7.00
409154	U72882	Hs.50842	interferon-induced protein 35	1.74	5.10
444954	AW247076	Hs.12163	eukaryotic translation initiation factor	1.71	5.15
424825	AF207069	Hs.153357	procollagen-lysine, 2-oxoglutarate 5-dio	1.70	4.43
428385	AF112213	Hs.184062	putative Rab5-interacting protein	1.69	4.06
427378	BE515037	Hs.177556	melanoma antigen, family D, 1	1.67	5.68
413322	AA380158	Hs.75290	ADP-ribosylation factor 4	1.67	4.56
442414	BE408758	Hs.8297	ribonuclease 6 precursor	1.65	4.40
410129	BE244074	Hs.58831	regulator of Fas-induced apoptosis	1.64	4.02
452472	AW957300	Hs.294142	ESTs, Weakly similar to C55663 oligodend	1.63	4.49
446143	BE245342	Hs.306079	sec61 homolog	1.62	4.73
413511	AI627178	Hs.75412	arginine-rich, mutated in early stage tu	1.60	4.19
415017	F06434	Hs.77805	ATPase, H transporting, lysosomal (vacuo	1.60	4.61
410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	1.59	4.26
410068	AI633888	Hs.58435	FYN-binding protein (FYB-120/130)	1.56	4.10
419489	AW411280	Hs.90693	replication initiation region protein (6	1.55	4.30
439627	BE621702	Hs.29076	hypothetical protein FLJ21841	1.55	6.54
414427	L19711	Hs.76111	dystroglycan 1 (dystrophin-associated gl	1.53	4.00
416971	R34657	Hs.80658	uncoupling protein 2 (mitochondrial, pro	1.53	4.79
426059	BE292842	Hs.166120	interferon regulatory factor 7	1.51	4.12
418879	AW162087	Hs.5437	Tax1 (human T-cell leukemia virus type I	1.50	4.93
433271	BE621697	Hs.14317	nuclear protein family A, member 3 (N	1.45	4.15
422481	AL050163	Hs.117339	DNAX-activation protein 10	1.45	4.03
432805	X94630	Hs.3107	CD97 antigen	1.43	4.11
447150	AF439011	Hs.85386	myeloid cell leukemia sequence 1 (BCL2-r	1.43	4.08
421975	AW961017	Hs.6459	hypothetical protein FLJ11856	1.41	4.36
427458	BE208354	Hs.29283	ESTs, Weakly similar to UKHU proteoglyca	1.41	4.10
412968	AW500508	Hs.75102	alanine tRNA synthetase	1.40	4.25
428511	AA019912	Hs.184693	transcription elongation factor B (StII)	1.38	4.91
413825	BE239181	Hs.75564	CD151 antigen	1.37	4.46
427496	D21260	Hs.178710	dab1rin, heavy polypeptide (Hc)	1.30	4.04
407143	C14076	Hs.332329	EST	1.29	4.37

TABLE 568:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

Pkey	CAT Number	Accession
412918	2764_3	BE784583 AL519009 AV755430 AV755633 AV711927 B1523434 AI521453 AA846815 AW024829 AW949702 BG218926 AA626658 AI445621 AI452815 AA946555 AA723580 AA612925 BG105326 BG532618 AW513994 AW602165 AJ373448 AA907901 AW135104 BG186662 W69205 BG219754 BE774875 BG190378 AA483698 BE065066 BE066067 BE066062 AW304207 BE939361 AW795569 BG210592 AW795644 BE939358 AW102886 BE065977 BG182971 H97042 OS8090 BI046351 H81248 AJ750112 AW372079 C05492 D58287 D75835 AA935095 BF700910 BG215802 BG195459 AW368467 BG495535 BG533177 BI087962 BE541579 BF130753 Z69892 AA210833 BM353155 AI473754 AI147901 AJ803109 AA843296 AA418925 AI478552 AI400067 AI360304 AA418828 AW301673 BE218952 AI532804 BF433234 AA394157 BF738047 BE467036 AA319724 AW290940 AI222671 AI347724 AW001711 AI028652 AA398130 AI470582 AI915936 AA908929 C75102 N36920 H50440 AI919034 AI004399 AI383862 AI212606 AA648518 AA516258 AI855321 N22865 AA848101 AI589792 AA758196 AA214530 AJ373911 AW194733 AA213447 AI290291 BF437165 AA757592 BF086904 AW959032 AW992466 BF446888 AI936337 BE938849 AW149064 AI701629 N90021 BC016556 BC016365 NM_016040 AF151858 BI561037 AW966873 AW967497 BE219482 BE018550 AW770511 AW469095 AW470133 BM150181 BM193977 AI824135 AI632346 AI129838 BM147664 AI292112 BE244667 AA251084 AW503659 BM193866 BM194481 BF446862 AL597435 BF000262 AI824386 AI990100 AW087624 AA668793 AI080084 BI335866 BI820940 BG779242 BMD69854 AA282620 AA256771 AW964511 AA451623 HD0335 AW370399 AW954201 BM145846 BG111760 AI750065 BG655794 AA564086 BG494071 BM069606 AI675331 BE302224 AI476466 AI625980 BM144854 AI184602 AI343932 AW136586 AW029464 AI708651 AA874243 BM145917 AA662210 AA825708 AI335858 AI273704 AA662171 N48971 AA976614 AI344537 AA609603 AI873901 AI859995 AA833589 AA765811 AI150322 AI926816 BM148634 N98862 AA019347 AA897062 AA831100 N59889 BE243185 AA282179 AA831098 AA112676 AI702407 BG621752 BE006492 AA332202 BG674256 N46921 BI048774 AW300233 BF739890 AW966879 AA393405 BF115146 AA910851 AA013099 N28878 AA287713 BE348728 BG616446 AL599953 AL599952 BF381073 AW505056 AA094735 H03613 AA287714 H27168 R54718 BF792697 AV693603 AV685883 BG619956 BF541504 BF216789 AA319751 BM452652 BF335838 AA280397 BG171509 BF571997 AA490239 AW388161 BE842126 BG165309 N71903 AI955397 AI536898 BE242040 F09718 AA772421 AA450218 M78543 BE241414 AA013098 H00297 AW576477 AW150918 AW591371 AI382711 N71926 H72497 AI265602 AA745055 AI281647 BF377670 T65207 BG532880 BG721680 AA285143 H27167 AW500235 BG494497 BF668899 BE379766 AW152643 AI803450 AI564343 AI092711 AI140525 AW152156 AI620740 AI554689 AI161209 AI290242 AI339745 AI374611 AI347388 AI558296 AI140529 AI366124 AA493912 AA406235 AA493889 AI057160 AW022264 AI097277 AI144126 AI080051 AA983529 AA860507 N53469 AA843767 NM1163 N70628 AA42577 AA983537 BF003004 AA626688 AA235977 AI057152 AI095366 AI095356 AA458646 AW194479 AA150439 AI375272 AW571777 AI59198 AA993793 BE814394 BE738239 AA127883 AI034344 T59504 D81608 AA908704 AW051665 AA382785 AA307208 N24639 AI370715 BE244980 AA485956 AW449675 AI191008 BF223749 N70752 N22266 AI191012 AA028001 AI419106 BF215661 BF591548 BG942356 AI474968 BE858217 BF793358 AV756758 BG483603 AI093724 BF693395 BG545345 AI744294 T59549 AA811773 BG499757 BE739425 AA514221 AA865491 AI282933 AA470456 AI276739 AA169357 BE932464 AA514889 AW819039 AW819083 BE843048 AI432496 AI470335 AI247243 BG533994 AA513783 AI887309 AA528036 AW972006 AW873028 AI924914 AI818810 AW152378 AW084946 AI521413 AI669583 BE932521 AI581370 BE180238 AW089750 AW771461 AW089714 AI590949 AI819148 AA731056 BF815234 BF911506 AA235803 AA485373 AI735658 AW393133 AW073080 AI707637 BF353320 BE843111 AW819036 AW393135 BG697291 AV648670 AV654332 AV67530 BG566964 AI807430 AI676072 AA837010 AI452482 AI625817 AW241750 BE048616 AI290928 AI580714 AA485530 BE175687 AV648513 AW130312 AI000556 AA632893 BE674169 BF001208 AA948166 BE175650 AA524664 AA490345 AI244948 AA602956 AA483492 AA918178 AW802049 BG675859 AV658871 BG678060 AI565004 AW819026 BE843092 AV686437 AV723049 BG16948 AI911647 AI743490 AI091096 BE857251 AI962074 AW400027 AW769317

5	450515	13638_2	AA34377 AA640112 BF876213 R82948 H26425 H82876 BE843095 BE843140 BG536641 BG617830 AA235802 BE774985 BE006682 BF342375 AA903144 BF336083 BF984258 AV657996 A1749532 BE768614 BE857252 BE932516 BE768573 AV657993 AV657777 AV752631 BE774974 T55847 BF095761 BF911511 BE710793 BE180119 BG617338 H45842 T55897 AV657718 BG563497 BE299605 AJ589870 AA847589 AJ470122 BF939896 AJ304356 BE223045 BF435800 AJ394207 AJ708171 AW025415 AJ079409 AW008420 AW304226 N34543 AW603578 AA526961 AA983631 N99134 AA626645 R45023 AA502417 AW672925 AA449585 AA953982 AW675471 AA010062 N80194 H14620 H28475 H26247 BF333581 AW842369 H06848 H05608 H81745 H15016 R51905 AA860423 AJ860904 AA876023 AA430373 AA988771 BC005265 BG176720 AW006027 BM352064 AW026316 AJ635822 AJ880584 AJ693769 AJ092211 BJ492387 AJ400449 AW166297 BF939910 AA232282 AW021432 AJ333893 AA494308 AA854899 AJ436795 AW069256 AA682373 AJ092748 AA993184 AJ126077 AJ081758 AJ240686 AJ261863 AJ378423 AA465237 AJ376096 AA035579 AJ087306 AA448162 AA129977 AJ090903 AJ080686 AJ288939 N33004 AJ801240 AW021546 AJ370773 AJ086064 AA669528 AJ250053 AJ070113 AA853181 AA858014 BG055562 BG839559 AW080765 AA032283 AW467587 H40506 D00762 NM_002788 AA641134 AJ582295 AJ417525 AJ63975 AJ093566 AJ077743 AJ290741 AW073417 BE875418 BM264076 BG876884 AJ680535 AW854219 BE774635 AW854212 BG952443 AW854221 AW854208 BE156348 BE843056 AW858991 BE937569 BG878291 BG876450 AW819099 AJ080570 AA449871 AJ135228 BM478404 BF126296 AA375499 AA248473 NM_005648 BC013809 L34587 BF103775 BG702618 BG716553 B1667090 BG505863 BF983483 BG718195 B1857891 BG501016 BM043599 AL521812 BG705730 BJ495545 BJ495546 BF112248 BM023182 BM023123 AJ075173 AW051799 BF058224 BJ324885 BF436008 AA398446 BG822375 BM019558 BM023382 BG164174 N56909 BJ467064 BM023464 AJ207475 BM311415 BG758430 BG758807 AJ934826 N90351 BG422026 BE910312 AJ027778 AJ081950 AJ360890 BM009115 AJ191829 BG759697 AJ138778 AA399403 AJ355589 AJ336427 AA868702 AJ393660 AA025127 BG027630 AA962774 AA631224 BG940967 BE791087 AA573315 W81685 AA393525 BG944103 AJ339125 AJ149864 AA977655 N90314 BE612839 BG491847 AJ129091 AA461234 AA781198 AA759256 AA888954 AA975844 AJ184099 AJ018025 AA338363 AJ003331 AJ193380 AA626020 AJ244476 AJ601114 AW135664 AJ206607 AW253599 AA813219 AJ684453 AA878626 AA772222 AJ085496 AJ630226 BG940966 AJ022010 AA770649 AA887624 AA491739 AA974295 BG530040 AA037091 AA019912 B1160457 H64512 BG503896 AL532360 BE794750 AA582906 AJ015067 AW271034 BG271636 AW075177 AW071374 AJ345565 AJ307208 BE138953 BE049086 AJ334881 AW075005 AW075181 AA464019 AW302733 AW075100 AW073433 AJ802854 AJ34909 AJ802853 AJ345036 AJ348921 AJ340734 AJ307478 AJ251289 AW303237 AW072520 AJ312145 AW073656 AW072513 AW071289 AJ307559 AA876186 T29587 AJ307493 AJ255068 AJ252868 AJ252839 AW074809 AJ252926 AJ252160 AJ251662 AJ251262 AJ610913 AJ270787 AJ270156 AJ252075 AW073469 AW072901 AW072496 AW071420 AJ305762 AJ254764 AJ028337 AJ251264 AW073049 AW071311 AJ340643 BE138965 BE138502 AW073456 AJ347333 AJ054335 BE139260 AJ054302 AJ054060 AJ054057 AJ053722 AJ289711 BE139228 AW470478 AW271039 AW302085 BE041872 AJ254494 AJ271496 AJ252427 BF718773 BF718645 AW074866 BE857822	
	406782	0_0		
10	426143	3806_1		
15	400223	2368_1		
20				
25	427239	20459_2		
30				
35				
40				

TABLE 56C:

Pkey:	Unique number corresponding to an Eos probeset
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NL_position:	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
404854	7143420	Plus	14260-14537
405506	6466489	Plus	80014-80401,80593-81125
402474	7547175	Minus	53526-53628,55755-55920,57530-57757

TABLE 57A: ABOUT 304 GENES UPREGULATED IN MELANOMA METASTASES RELATIVE TO NORMAL SKIN

Table 57A lists about 304 genes upregulated in melanoma metastases relative to normal skin. Genes were selected from 59680 probesets on the Eos/Altmatrix Hu30 Genchip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey:	Unique Eos probeset identifier number
ExAccn:	Exemplar Accession number, Genbank accession number
UnigenelD:	Unigene number
Unigene Title:	Unigene gene title
R1:	90th percentile of melanoma metastasis AIs divided by the 90th percentile of normal skin AIs
R2:	90th percentile of melanoma metastasis AIs divided by the 90th percentile of normal skin AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

55	Pkey	ExAccn	UnigenelD	Unigene Title	R1	R2
	422424	AI186431	Hs.296638	prostate differentiation factor	18.94	25.00
	438549	BE386801	Hs.21858	trinucleotide repeat containing 3	17.45	18.47
	417880	BE241595	Hs.82848	selectin L (lymphocyte adhesion molecule	14.05	11.15
	452838	UE5011	Hs.30743	preferentially expressed antigen in mela	13.91	15.41
60	446619	AJ076643	Hs.313	secreted phosphoprotein 1 (osteopontin,	13.41	9.73
	426555	NM_000372	Hs.2053	tyrosinase (oculocutaneous albinism IA)	12.24	7.33
	439310	AF086120	Hs.102793	ESTs	10.12	10.80
	414020	NM_002984	Hs.75703	small inducible cytokine A4 (homologous	9.74	10.16
	447210	AF035269	Hs.17752	phosphatidylserine-specific phospholipas	9.43	11.69
65	414812	X72755	Hs.77367	monokine induced by gamma interferon	9.28	10.97
	430377	NM_001922	Hs.301865	dopachrome tautomerase (dopachrome delta	9.07	7.96
	426600	NM_003378	Hs.171014	VEGF nerve growth factor inducible	9.06	19.93
	453857	AL080235	Hs.35861	DKFZP586E1621 protein	8.66	5.87
70	418310	AA814100	Hs.86693	ESTs	8.65	6.62
	433447	U29195	Hs.3281	neuronal pentraxin II	8.27	4.68
	430280	AA381258	Hs.237868	interleukin 7 receptor	8.01	6.37
	430822	AJ005371	Hs.248017	glyceraldehyde-3-phosphate dehydrogenase	7.80	6.10
	456373	BE247706	Hs.89751	membrane-spanning 4-domains, subfamily A	7.78	7.60
	415752	BE314524	Hs.78776	putative transmembrane protein	7.68	5.41
75	419628	H67546	Hs.49768	ESTs	7.66	8.96
	417355	D13168	Hs.82002	endothelin receptor type B	7.56	4.59
	424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	7.48	5.77
	412228	AW503785	Hs.73792	complement component (3d/Epstein Barr vi	7.43	4.93
	436485	X59135	Hs.156110	immunoglobulin kappa constant	7.35	7.98
80	414646	AA353776	Hs.901	CD48 antigen (B-cell membrane protein)	6.97	5.06
	422241	Y00062	Hs.170121	protein tyrosine phosphatase, receptor I	6.83	5.20
	429170	NM_001394	Hs.2359	dual specificity phosphatase 4	6.67	3.77
	417542	J04129	Hs.82269	progestagen-associated endometrial prote	6.67	15.22

5	428398	AI249368	Hs.98558	ESTs	6.57	3.60
	408989	AW361666	Hs.49500	KIAA0746 protein	6.48	4.93
	417022	NM_014737	Hs.80905	Ras association (Raf/GOS/AF-6) domain fam	6.38	3.65
	449644	AW960707	Hs.148324	ESTs	6.35	5.84
	412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	6.30	7.18
	457211	AW972565	Hs.32399	ESTs, Weakly similar to S51797 vasodilat	6.25	7.21
	420991	AW504814	Hs.287379	Homo sapiens mRNA for FLJ001111 protein,	6.25	5.36
	428227	AA321649	Hs.2248	small inducible cytokine subfamily B (Cy	6.18	6.01
10	432828	AB042326	Hs.287402	chondroitin 4-sulfotransferase	6.12	6.51
	449078	AK001256	Hs.22975	KIAA1576 protein	6.05	8.55
	436856	AI469355	Hs.127310	ESTs	6.00	5.54
	433658	L03678	Hs.156110	immunoglobulin kappa constant	5.92	7.18
	424247	X14008	Hs.234734	lysozyme (renal amyloidosis)	5.89	4.07
15	409417	AA156247	Hs.104879	serine (or cysteine) proteinase inhibitor	5.86	6.07
	415174	AW572659	Hs.261373	hypothetical protein dJ434014.3	5.74	6.03
	458079	AI796870	Hs.54277	DNA segment on chromosome X (unique) 992	5.72	5.92
	440274	R24595	Hs.71122	scrapie responsive protein 1	5.69	3.22
	429412	NM_006235	Hs.2407	POU domain, class 2, associating factor	5.69	5.17
20	432606	NM_002104	Hs.3066	granzyme K (serine protease, granzyme 3;	5.68	3.35
	436315	BE390513	Hs.27935	hypothetical protein MGC4837	5.67	4.56
	452973	H88409	Hs.40527	ESTs	5.63	5.50
	426559	AB001914	Hs.170414	paired basic amino acid cleaving system	5.62	3.09
	406663	U24683		immunoglobulin heavy constant mu	5.54	9.68
25	416975	NM_004131	Hs.1051	granzyme B (granzyme 2, cytotoxic T-lymp	5.52	6.42
	408380	AF123050	Hs.44532	diubiquitin	5.51	4.49
	418299	AA279530	Hs.83968	integrin, beta 2 (antigen CD18 (p95), ly	5.43	4.50
	429500	X78565	Hs.289114	hexabrachion (tenascin C, cytactin)	5.42	3.54
	446341	AL040763	Hs.310735	ESTs, Moderately similar to ALU7_HUMAN A	5.41	5.29
30	425234	AW152225	Hs.165909	ESTs, Weakly similar to I38022 hypotheri	5.40	4.35
	434203	BE262677	Hs.283558	hypothetical protein PRO1855	5.38	4.16
	420338	AA825595	Hs.88269	Homo sapiens, clone MGC:17339, mRNA, com	5.37	5.77
	430580	AA806105	Hs.300697	immunoglobulin heavy constant gamma 3 (G	5.31	5.32
	428804	AK000713	Hs.193736	hypothetical protein FLJ20706	5.29	4.80
35	447735	AA775268	Hs.6127	Homo sapiens cDNA: FLJ23020 fis, clone L	5.29	3.61
	410491	AA465131	Hs.64001	Homo sapiens clone 25218 mRNA sequence	5.27	5.35
	410361	BE391804	Hs.62661	guanylate binding protein 1, interferon-	5.26	6.00
	412561	NM_002286	Hs.74011	lymphocyte-activation gene 3	5.26	5.04
	450293	N36754	Hs.171118	hypothetical protein FLJ00026	5.23	3.60
40	400750			Target Exon	5.18	3.62
	417933	X02308	Hs.82962	thymidylate synthetase	5.14	3.33
	413385	M34455	Hs.840	indoleamine-pyrrole 2,3 dioxygenase	5.12	5.36
	445784	AI253155	Hs.146065	ESTs	5.12	4.06
	420602	AF060877	Hs.99236	regulator of G-protein signaling 20	5.06	7.68
45	421508	NM_004833	Hs.105115	absent in melanoma 2	5.03	5.59
	434826	AF155661	Hs.22265	pyruvate dehydrogenase phosphatase	4.96	6.25
	402474			NM_004079:Homo sapiens cathepsin S (CTSS	4.95	5.13
	400417	X72475		Target	4.90	3.93
50	420137	AA306478	Hs.95327	CD3D antigen, delta polypeptide (TIT3 co	4.88	6.81
	409264	NM_014937	Hs.52463	KIAA0966 protein	4.88	3.18
	418460	M26315	Hs.85258	CD8 antigen, alpha polypeptide (p32)	4.87	4.20
	418506	AA084248	Hs.85339	G protein-coupled receptor 39	4.85	5.86
	409142	AL136877	Hs.50758	SMC4 (structural maintenance of chromoso	4.83	5.94
	425088	AA663372	Hs.169395	hypothetical protein FLJ12015	4.82	5.19
55	405506			Target Exon	4.74	4.09
	409512	AW979187	Hs.293591	melanoma differentiation associated prot	4.74	3.72
	430838	N46664	Hs.169395	hypothetical protein FLJ12015	4.73	3.50
	439963	AW247529	Hs.6793	platelet-activating factor acetylhydrola	4.72	3.66
	421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	4.71	5.16
60	447217	BE465754	Hs.17778	neuropilin 2	4.70	4.52
	422309	U79745	Hs.114924	solute carrier family 16 (monocarboxytic	4.69	3.51
	413670	AB000115	Hs.75470	hypothetical protein, expressed in osteo	4.68	3.69
	419956	AL137939	Hs.40096	cadherin 19, type 2	4.68	5.83
65	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su	4.68	5.29
	449217	AA278536	Hs.23262	ribonuclease, RNase A family, k6	4.66	3.84
	449722	BE280074	Hs.23960	cyclin B1	4.64	4.29
	424006	AF054815	Hs.137548	CD84 antigen (leukocyte antigen)	4.62	4.54
	407846	AA426202	Hs.40403	Cbp/p300-interacting transactivator, wit	4.62	6.78
	414821	M63835	Hs.77424	Fc fragment of IgG, high affinity Ia, re	4.59	5.81
70	406673	M34996	Hs.198253	major histocompatibility complex, class	4.57	5.60
	431620	AA126109	Hs.264981	2'-5'-oligoadenylate synthetase 2 (63-71	4.56	4.44
	441224	AI076964	Hs.7753	calumenin	4.56	3.75
	442739	NM_007274	Hs.8679	cytosolic acyl coenzyme A thioester hydr	4.56	3.22
	444371	BE540274	Hs.239	forkhead box M1	4.53	5.28
75	448719	AA033627	Hs.21858	trinucleotide repeat containing 3	4.48	9.08
	420301	AA767526	Hs.22030	paired box gene 5 (B-cell lineage specif	4.47	5.61
	430294	AI538226	Hs.32976	guanine nucleotide binding protein 4	4.43	4.11
	428513	BE220806	Hs.184697	Homo sapiens clone Z3785 mRNA sequence	4.41	4.43
	446006	NM_004403	Hs.13530	deafness, autosomal dominant 5	4.39	3.99
80	432485	N90866	Hs.276770	CDW52 antigen (CAMPATH-1 antigen)	4.38	5.50
	428242	H55709	Hs.2250	leukemia inhibitory factor (cholestergic	4.37	3.25
	421633	AF121860	Hs.106260	sorting nexin 10	4.36	6.23
	414829	AA321568	Hs.77436	pleckstrin	4.35	2.91
	417166	AA431323	Hs.42146	ESTs	4.35	4.08

5	448410	AK000227	Hs.21126	hypothetical protein FLJ20220	4.34	5.35
	419381	AB023420	Hs.90093	heat shock 70kD protein 4	4.34	3.72
	411305	BE241596	Hs.69547	myelin basic protein	4.32	4.18
	425289	AW139342	Hs.155530	interferon, gamma-inducible protein 16	4.28	2.44
	451099	RS2795	Hs.25954	interleukin 13 receptor, alpha 2	4.27	4.48
	432642	BE297635	Hs.3069	heat shock 70kD protein 9B (mortalin-2)	4.25	2.69
	422282	AF019225	Hs.114309	apoptoprotein L	4.25	3.75
	433867	AK000596	Hs.3618	hippocampin-like 1	4.23	5.13
10	415817	U88957	Hs.78867	protein tyrosine phosphatase, receptor-4	4.20	2.15
	438619	AB032773		TU1281-TY protein	4.19	3.32
	426317	AA312350	Hs.169294	transcription factor 7 (T-cell specific,	4.16	5.14
	420208	BE276055	Hs.95972	silver (mouse homolog) like	4.16	5.08
	416602	NM_006159	Hs.79389	Protein kinase C-binding protein NELL2	4.16	2.38
15	430770	AA765694	Hs.123296	ESTs	4.15	3.67
	424541	AW392551	Hs.180559	ESTs, Weakly similar to A56194 thromboxa	4.15	3.98
	427337	Z45223	Hs.176663	Fc fragment of IgG, low affinity IIb, r	4.14	3.51
	456760	AW961251	Hs.127828	guanine nucleotide binding protein (G pr	4.14	4.42
	406858	AA505445	Hs.300697	immunoglobulin heavy constant gamma 3 (G	4.13	5.07
20	420931	AF044197	Hs.100431	small inducible cytokine B subfamily (Cy	4.12	6.43
	410016	AA297977	Hs.57907	small inducible cytokine subfamily A (Cy	4.11	8.73
	452698	NM_001295	Hs.301921	chemokine (C-C motif) receptor 1	4.11	4.48
	444863	AW384082	Hs.104879	serine (or cysteine) proteinase inhibito	4.10	4.78
	435080	AJ831760	Hs.155111	hypothetical protein FLJ14428	4.07	2.76
25	442711	AF151073	Hs.8645	hypothetical protein	4.06	3.49
	423605	AF047826	Hs.129887	cadherin 19, type 2	4.06	2.42
	409038	T97490	Hs.50002	small inducible cytokine subfamily A (Cy	4.05	3.26
	421712	AK000140	Hs.107139	hypothetical protein	4.02	7.60
	422283	AW411307	Hs.114311	CDC45 (cell division cycle 45, S.cerevis	4.00	3.87
30	409415	AA579258	Hs.6083	Homo sapiens cDNA: FLJ21028 fs, clone C	4.00	5.87
	412719	AW016610	Hs.816	ESTs	3.99	5.46
	437179	AA393508		serologically defined colon cancer antiq	3.96	4.51
	420319	AW406289	Hs.96593	hypothetical protein	3.95	5.47
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/h	3.91	4.58
35	418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	3.84	4.42
	420286	A1796395	Hs.111377	ESTs	3.83	4.56
	410600	AW575742		ESTs, Moderately similar to S65657 alpha	3.80	5.70
	410326	A1368909	Hs.47650	ESTs	3.76	4.86
40	424779	AL046851	Hs.153053	CD37 antigen	3.70	8.72
	452194	A1694413		Ubiquitin-like protein FAT107?? - diubiq	3.69	6.38
	411027	AF072099	Hs.57846	leukocyte immunoglobulin-like receptor,	3.65	5.40
	412140	AA219691	Hs.73625	RAB6 interacting, kinesin-like (raklines	3.65	4.48
	424153	AA451737	Hs.141496	MAGE-Bike 2	3.64	5.82
	421666	AL035250	Hs.1408	endothelin 3	3.64	5.52
45	429732	U20158	Hs.2488	lymphocyte cytosolic protein 2 (SH2 doma	3.60	5.56
	422173	BE385828	Hs.250619	phorbol-in-like protein MDS019 (CEM15)	3.59	4.35
	421563	NM_006433	Hs.105806	granulysin	3.49	7.38
	453837	AL138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	3.49	6.13
	424326	NM_014479	Hs.145296	ADAM-like disintegrin protease, decysin	3.48	4.23
50	427247	AW504221	Hs.174103	integrin, alpha L (antigen CD11A (p180),	3.47	5.38
	408838	AJ669535	Hs.40369	ESTs	3.45	4.59
	402829			C1002500:gi 5754254 ref NP_034610.1  hea	3.42	5.01
	418918	X07871	Hs.89476	CD2 antigen (p50), sheep red blood cell	3.42	8.14
55	430594	AK000790	Hs.246885	hypothetical protein FLJ20783	3.40	4.35
	429714	BE561801	Hs.2484	T-cell leukemia/lymphoma 1A	3.36	4.84
	414324	Y14768	Hs.890	lymphotoxin beta (TNF superfamily, membe	3.35	4.45
	421958	AA357185	Hs.109918	ras homolog gene family, member H	3.35	4.28
	428291	AA534009	Hs.183487	interferon stimulated gene (20kD)	3.34	5.18
	424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	3.31	8.00
60	451736	AW080356	Hs.23889	ESTs, Weakly similar to ALU7_HUMAN ALU S	3.29	4.50
	412790	NM_014767	Hs.74583	KJAA0275 gene product	3.28	5.42
	404854			Target Exon	3.28	4.28
	400860			Target Exon	3.26	4.41
	430413	AW842182	Hs.241392	small inducible cytokine A5 (RANTES)	3.24	5.65
65	438209	AL120659	Hs.6111	aryl-hydrocarbon receptor nuclear trans	3.24	4.35
	422846	BE513934	Hs.1583	neutrophil cytosolic factor 1 (47kD, chr	3.24	4.90
	440065	W03476	Hs.265331	hypothetical protein MGC4595	3.20	6.21
	440704	M69241	Hs.162	insulin-like growth factor binding prote	3.20	4.72
	411088	BE247593	Hs.145053	ESTs	3.18	4.20
70	447513	AW955776	Hs.313500	ESTs, Moderately similar to ALU7_HUMAN A	3.18	4.68
	413190	AA151802	Hs.40368	adaptor-related protein complex 1, sigma	3.15	4.27
	430017	AA263172	Hs.35	protein tyrosine phosphatase, non-recept	3.15	4.28
	406837	R70292	Hs.156110	immunoglobulin kappa constant	3.12	4.09
	409103	AF251237	Hs.112208	XAGE-1 protein	3.04	4.04
75	425706	AW406678	Hs.122559	hypothetical protein FLJ22570	3.04	4.28
	447656	NM_003726	Hs.19126	src kinase-associated phosphoprotein of	3.03	4.30
	427792	M63928	Hs.180841	tumor necrosis factor receptor superfam	3.01	4.82
	402994			NM_002463: Homo sapiens myxovirus (intu	2.99	5.74
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	2.97	5.07
80	449523	NM_000579	Hs.54443	chemokine (C-C motif) receptor 5	2.96	4.15
	439237	AW408158	Hs.318893	ESTs, Weakly similar to A47582 B-cell gr	2.96	5.81
	406621	X57809	Hs.8997	immunoglobulin lambda locus	2.93	7.88
	447131	NM_004585	Hs.17466	retinoic acid receptor responder (tazaro	2.91	13.22
	426322	J05068	Hs.2012	transcobalamin I (vitamin B12 binding pr	2.90	8.37

	448275	BE514434	Hs.20830	kinesin-like 2	2.87	4.15
	423397	NM_001838	Hs.1652	chemokine (C-C motif) receptor 7	2.86	5.53
	406782	AA430373		gbzw20111.s1 Soares ovary tumor NbHOT H	2.81	4.60
5	414915	NM_002462	Hs.76391	myxovirus (influenza) resistance 1, homo	2.80	5.69
	412819	T25829	Hs.24048	FK506 binding protein precursor	2.78	4.90
	432886	BE159028	Hs.279704	chromatin accessibility complex 1	2.76	4.21
	428380	NM_004271	Hs.184018	MD-1, RP105-associated	2.76	5.15
	408209	NM_004454	Hs.43697	ets variant gene 5 (ets-related molecule	2.76	4.30
10	416511	NM_006762	Hs.79356	Lysosomal-associated multispinning membr	2.75	4.13
	422530	AW972300	Hs.118110	bone marrow stromal cell antigen 2	2.74	5.05
	428746	AW503820	Hs.192861	Spi-B transcription factor (Spi-1/PU.1 r	2.73	9.20
	453953	AW408337	Hs.36972	CD7 antigen (p41)	2.72	4.38
	407241	M34516		gb:Human omega light chain protein 14.1	2.68	4.07
15	437669	AI358105	Hs.123164	ESTs, Weakly similar to match to ESTs AA	2.66	4.71
	453779	N35187	Hs.43388	28kD interferon responsive protein	2.65	4.31
	432874	W94322	Hs.279651	metanoma inhibitory activity	2.64	4.15
	410129	BE244074	Hs.58831	regulator of Fas-induced apoptosis	2.62	7.36
	412926	AI879076	Hs.75061	macrophage myristoylated alanine-rich C	2.62	4.43
20	418739	AA310964	Hs.88012	SHP2 interacting transmembrane adaptor	2.61	5.42
	424825	AF207069	Hs.153357	procollagen-lysine, 2-oxoglutarate 5-dio	2.60	9.69
	417370	T28651	Hs.82030	tryptophanyl-tRNA synthetase	2.60	5.17
	411358	R47479	Hs.94761	KIAA1691 protein	2.59	4.01
	425367	BE271188	Hs.155975	protein tyrosine phosphatase, receptor t	2.58	13.24
25	426470	AA528794	Hs.128644	ESTs	2.54	4.52
	425535	AB007937	Hs.158287	KIAA0468 gene product	2.52	11.31
	431629	AU077025	Hs.255827	interferon, alpha-inducible protein (clo	2.50	7.80
	425722	AI659076	Hs.97031	hypothetical protein MGC13047	2.49	4.25
	438291	BE514605	Hs.289092	Homo sapiens cDNA: FLJ22380 fs, clone H	2.49	4.04
	416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fs, clone PL	2.48	4.08
30	441859	AW194364	Hs.94814	ESTs, Weakly similar to FIG1 MOUSE FIG-1	2.48	5.25
	416714	AF283770	Hs.79630	CD79A antigen (immunoglobulin-associated	2.48	4.88
	431186	NM_012249	Hs.250697	ras-like protein	2.46	6.04
	417389	BE260964	Hs.82045	midkine (neurite growth-promoting factor	2.45	5.34
35	424481	R19453	Hs.1787	proteolipid protein 1 (Pelizaeus-Merzbac	2.43	6.57
	428437	AV656017	Hs.184325	CGI-76 protein	2.42	4.96
	427634	AI399745	Hs.18449	hypothetical protein MGC10820	2.39	8.46
	420842	AI083668	Hs.50601	hypothetical protein MGC10986	2.38	5.90
	428289	M26301	Hs.2253	complement component 2	2.38	5.32
40	417929	R27219	Hs.74647	Human T-cell receptor active alpha-chain	2.37	6.99
	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	2.34	9.69
	433671	AW138797	Hs.132906	18A24 protein	2.34	4.81
	432403	AA550815	Hs.124840	ESTs	2.34	4.99
	427759	BE245578	Hs.2200	perforin 1 (pore forming protein)	2.32	4.56
45	419870	AW403911	Hs.266175	phosphoprotein associated with GEMs	2.30	4.22
	421445	AA913059	Hs.104433	Homo sapiens, clone IMAGE:4054868, mRNA	2.30	6.18
	401591			Target Exon	2.29	7.01
	451708	AI306536	Hs.60975	ESTs	2.26	4.50
	452700	AI859390	Hs.288940	five-span transmembrane protein M83	2.24	4.90
50	424618	L29472	Hs.1802	major histocompatibility complex, class	2.22	5.40
	409208	Y00093		integrin, alpha X (antigen CD11C (p150),	2.21	4.74
	436456	AW292677	Hs.248122	G protein-coupled receptor 24	2.19	4.61
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	2.17	7.43
	416448	L13210	Hs.79339	lectin, galactoside-binding, soluble, 3	2.16	5.58
55	438555	AI222089	Hs.143878	Homo sapiens mRNA for FLJ00024 protein,	2.13	4.26
	407260	L09095		gb:Homo sapiens mRNA fragment,	2.13	4.00
	448243	AW369771		integrin, beta 8	2.10	4.03
	437938	AI950087		gb:wq05c02.x1 NCI_CGAP_Kid12 Homo sapien	2.07	4.45
	425262	D87119	Hs.155418	GS3955 protein	2.06	4.36
60	414945	BE076358	Hs.77667	lymphocyte antigen 6 complex, locus E	2.05	4.66
	400261			Eos Control	2.04	4.22
	432468	AW402155	Hs.3003	CD3E antigen, epsilon polypeptide (TIT3	2.02	4.23
	416967	BE616731	Hs.80645	interferon regulatory factor 1	1.99	4.45
	420626	AF043722	Hs.99491	RAS guanyl releasing protein 2 (calcium	1.98	4.42
65	440672	AF083811	Hs.7345	MAD1 (mitotic arrest deficient, yeast, h	1.98	4.55
	452923	BE276018	Hs.288940	five-span transmembrane protein M83	1.96	4.54
	452244	N33530	Hs.176674	ESTs	1.95	4.23
	427239	BE270447		ubiquitin carrier protein	1.94	4.93
	418678	NM_001327	Hs.167379	cancer/testis antigen (NY-ESO-1)	1.94	5.28
70	431836	AF178532	Hs.271411	beta-site APP-cleaving enzyme 2	1.93	4.17
	444090	S69115	Hs.10306	natural killer cell group 7 sequence	1.93	5.06
	404067			Target Exon	1.92	6.16
	426890	AA393167	Hs.41294	ESTs	1.91	4.23
	453597	BE281130	Hs.33713	myo-inositol 1-phosphate synthase A1	1.91	4.10
75	401914			Target Exon	1.87	4.76
	448499	BE613280	Hs.77550	hypothetical protein MGC1780	1.87	5.17
	439627	BE621702	Hs.29076	hypothetical protein FLJ21841	1.85	6.59
	425923	NM_005026	Hs.162808	phosphoinositide-3-kinase, catalytic, de	1.85	4.03
	416819	U77735	Hs.80205	pim-2 oncogene	1.84	4.57
80	425069	AA687465	Hs.298184	potassium voltage-gated channel, shaker-	1.84	6.40
	430378	Z29572	Hs.2556	tumor necrosis factor receptor superfami	1.78	4.02
	435968	AW161481	Hs.111577	integral membrane protein 3	1.76	5.26
	410423	AW402432	Hs.63489	protein tyrosine phosphatase, non-recept	1.75	4.30
	434224	AA380731	Hs.84	interleukin 2 receptor, gamma (severe co	1.74	4.91



5	413566	AW504451	Hs.285814	sprouty (Drosophila) homolog 4	1.71	6.00			
	430148	BE387620	Hs.234489	lactate dehydrogenase B	1.70	4.34			
	410068	AI633888	Hs.58435	FYN-binding protein (FYB-120/130)	1.69	4.04			
	437696	Z83844	Hs.5790	hypothetical protein dJ37E16.5	1.66	5.95			
	423984	AF163825	Hs.136713	pre-B lymphocyte gene 3	1.64	6.26			
	426666	AW500131	Hs.171763	CD22 antigen	1.63	4.33			
	406908	Z25437		gb:H.sapiens protein-tyrosine kinase gen	1.62	7.19			
	440087	W28969	Hs.7718	hypothetical protein FLJ22578	1.61	4.33			
	421859	AA356620	Hs.108947	KIAA0050 gene product	1.59	4.30			
10	415198	AW009480	Hs.943	natural killer cell transcript 4	1.56	4.12			
	406827	AA971409		gb:op92c04.s1 NCL CGAP_Lu5 Homo sapiens	1.55	4.29			
	413969	X14034	Hs.75648	phospholipase C, gamma 2 (phosphatidylin	1.53	4.63			
	456086	AL161999	Hs.77324	eukaryotic translation termination facto	1.52	4.11			
	433320	D60647	Hs.250879	ESTs, Highly similar to CTXN RAT CORTEXI	1.52	4.36			
15	406906	Z25424		gb:H.sapiens protein-serine/threonine ki	1.50	8.67			
	406885	D28423		gb:Human mRNA for pre-mRNA splicing fact	1.49	5.07			
	443759	BE390832	Hs.134729	FXD domain-containing ion transport reg	1.48	4.50			
	452423	AA991724	Hs.180535	hypothetical protein MGC10966	1.48	4.91			
	448143	AF039704	Hs.20478	ceroid-lipofuscinosis, neuronal 2, late	1.43	4.26			
20	451524	AK001466	Hs.26516	hypothetical protein FLJ10604	1.43	4.74			
	417287	AI831678	Hs.285714	KIAA1599 protein	1.41	4.01			
	432665	AW603880		ATPase, H transporting, lysosomal (vacuo	1.38	4.07			
	403043			Target Exon	1.36	4.89			
	407239	AA076350	Hs.67846	leukocyte immunoglobulin-like receptor,	1.32	4.57			
25	436553	AW407157	Hs.8997	immunoglobulin lambda locus	1.30	4.00			
	422934	BE244189	Hs.122492	hypothetical protein	1.30	4.37			
	442680	BE270707	Hs.8583	similar to APOBEC1	1.26	4.48			
30	TABLE 57B:								
	Pkey:	Unique Eos probeset identifier number							
	CAT number:	Gene cluster number							
	Accession:	Genbank accession numbers							
35	Pkey	CAT Number	Accession						
	438619	35124_1	NM_016575 AB032773 AI765521 BF593742 AI47757 AI761233 AW467938 BF000670 AI818496 N24761 AL043306 BF476138 BF593836 AA132787						
			AI147248 AI086795 AA151317 T95298 AW083548 AA058371 N27951 AI769860 AI784548 AW205506 AI800679 AI041733 AI459902 BE327641						
			AI865829 AI254736 AI302433 AI744176 AI241825 AA027842 AL524933 AL524932 BF947764 BF340737 BF948700 BG996395 NS3455 N21027						
			AI127616 N35901 AA682443 AA678249 AA19371 AA132582 T15981 H99958 N40717 AW959402 AI267251 BF909329 AI142035 T95379 H29420						
			RS9632 HI7318 HI7331 H29327 R40829 R43395 RS9573 AI749561 R56599 H16755 AI694500 AA027907						
40	437179	12239_1	AK055109 BC019085 AA187684 BG656226 BM023227 AI932311 AW264381 AA398371 BM021483 AI432433 AI375777 AI129580 AW262782						
			AA134107 BM023515 AA977504 AI859222 AI348454 R69725 AA975268 BM021207 AL080074 AA129218 AW207842 N90581 AA771919 AI092259						
			AI028416 AI074114 BG656536 BE501677 AW193419 AA917040 W90430 AI342984 AI378957 AL036486 AW020068 BI491093 BF476021 R41226						
			R69631 F04125 C02343 AA115589 R56480 AI400988 R54266 R31422						
45	410600	497855_1	BF347859 AW499616 AA191322 AW499617 AL601010 AW575742 AA729043 BE463447 AA086179 BE549623 AI335824 AW408712 BM149172						
	452194	90339_1	AI694413 AW994700 AI912946 N73548 AI082035 AW271652 W24189 W24182 AI719718 AA024658 AW810120 AW015394 T79755 AA988043						
			AI709339						
	406782	0_0	AA430373 AA988771						
	409208	10117_2	AK074047 AI144342 AWD014280 BM145128 N28267 AW206231 AA989041 H93197 AW594063 BG236296 AW236606 AW081031 AA765843 BM144372						
50			AA989341 AI824838 AI963970 AI637671 AW196330 BG427526 BM148789 BF893644 BF881946						
	448243	13061_2	AG166513 AA479726 BE622314 AL134913 BE006305 BE006312 BE006298 AA044582 AW994956 AA234175 AA043906 BE006303 BF327669						
			BE006317 BF326759 BF541959						
	437938	66997_1	U71456 AA482911 W78802 AW856538 BF737212 N36809 N36320 AA282915 AW505512 AI653832 W87891 AI961530 T85904 H59397 R97278						
55			W01059 AI820532 T82391 AI820501 T63226 R66056 R67840 AW961101 AA337499 W37181 AA180009 AW205862 AA988777 AA856975 BF172457						
			BG751124 AI741346 AI950344 AI689062 AI872193 AW102898 AW173586 AI763273 AI890387 AW150329 AI762688 AA488892 AI356394 AI539642						
			AA642789 AI950087 BF589902 N70208 AA263144 AA488964 H60052 R97040 BF886630 AW967677 AW971573 AW967671 AI308119 AA251875						
			AA908598 AI819225 AI564269 AA908741 AA293273 AA969759 AW276905 AA044209 H83488 T92487						
	400261	23110_1	BC006097 X03066 NM_002120 M26040 AW469119 AW469127 AI299772 AW518149 AI144456 AW628070 AI629032 AI358810 AI880433 AI440472						
			AI357070 AI855365 AWD014799 AI767973 AW518041 AA909398 AW768606						
60	427239	20459_2	AL532360 BE794750 AA582906 AID15067 AW271034 BG271636 AW075177 AW071374 AI345565 AI307208 BE138953 BE049086 AI334881						
			AW075006 AW075181 AA464019 AW302733 AW075100 AW073433 AI802854 AI334909 AI802853 AI345036 AI348921 AI307478 AI307478 AI251289						
			AW302327 AW072520 AI312145 AW073656 AW072513 AW071289 AI307559 AA876186 T29587 AI307493 AI255068 AI252868 AI252839 AW074809						
			AI252926 AI252160 AI251662 AI251262 AI610913 AI270787 AI270156 AI252075 AW073469 AW072901 AW072496 AW071420 AI305762 AI254764						
			AI802837 AI251264 AW073049 AW071311 AI340643 BE138965 BE138502 AW073456 AI334733 AI054335 BE139260 AI054302 AI054060 AI054057						
			AI053722 AI289711 BE139228 AW470478 AW271039 AW302085 BE041872 AI254494 AI271496 AI252427 BF718773 BF718645 AW074856 BE857822						
65	406827	0_0	AA971409						
	432665	27095_3	BG165971 BE143233 AL577712 AI400326 AA769318 AA427866 AW088714 AI150755 AI924874 AI185243 AA804195 AA768972 AW574759						
			AW341643 AW204520 AA235326 AID05076 BE826687 AW004816 AW007235 BE826639 BE826634 BF222941 BE826631 BE826643 AA292639						
			AW514133 AI690331 AI673409 AA627727 AI923685 AA931499 AI249783 AI810663 AA548622 AA702095 AA832395 BI259508 AA262993 AW075840						
			AA810885						
70	TABLE 57C:								
	Pkey:	Unique number corresponding to an Eos probeset							
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA							
		sequence of human chromosome 22" Dunham, et al. (1999) <u>Nature</u> 402:489-495.							
75	Strand:	Indicates DNA strand from which exons were predicted.							
	NL_position:	Indicates nucleotide positions of predicted exons.							
80	Pkey	Ref	Strand	NL_position					
	400750	8119067	Plus	198991-199168, 199316-199548					
	402474	7547175	Minus	53526-53628, 55755-55920, 57530-57757					
	405506	6466489	Plus	80014-80401, 80593-81125					
	402829	8918414	Plus	101532-101852, 102006-102263					
	404854	7143420	Plus	14260-14537					



400860	9757499	Minus	151830-152104, 152649-152744
402994	2996643	Minus	4727-4969
401591	9966977	Minus	55410-55835
404067	3282162	Plus	1415-2071
401914	9369520	Plus	62537-62945, 63155-63308
403043	7768753	Minus	314423-316252

TABLE 58A: ABOUT 183 GENES UPREGULATED IN MELANOMA METASTASES FROM PATIENTS WITH LIMITED DISEASE RELATIVE TO MELANOMA METASTASES FROM PATIENTS WITH PROGRESSIVE DISEASE

Table 58A lists about 183 genes upregulated in melanoma metastases from patients with limited disease relative to melanoma metastases from patients with progressive disease. Genes were selected from 59680 probesets on the Eos/Alfymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probeset identifier number

ExAccn: Exemplar Accession number, Genbank accession number

UnigeneID: Unigene number

Unigene Title: Unigene gene title

R1: 90th percentile of AIs for metastases from patients with limited disease divided by 90th percentile of AIs for metastases from patients with progressive disease

R2: 90th percentile of AIs for metastases from patients with limited disease divided by 90th percentile of AIs for metastases from patients with progressive disease, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
415658	AW957684	Hs.306814	hypothetical protein FLJ21889	12.74	12.92
447414	D82343	Hs.74376	neuroblastoma (nerve tissue) protein	7.66	5.88
412659	AW753865	Hs.74376	olfactomedin related ER localized protei	7.23	5.76
430154	AW583058	Hs.234726	serine (or cysteine) proteinase inhibito	6.91	14.26
414430	A1346201	Hs.76118	ubiquitin carboxyl-terminal esterase L1	6.86	7.10
436485	XS9135	Hs.156110	immunoglobulin kappa constant	6.85	6.81
426600	NM_003378	Hs.171014	VGF nerve growth factor inducible	6.73	11.21
430822	AJ005371	Hs.248017	glyceraldehyde-3-phosphate dehydrogenase	5.53	4.63
416426	AA180256	Hs.210473	Homo sapiens cDNA FLJ14872 fs, clone PL	5.48	7.08
423858	AL137326	Hs.133483	Homo sapiens mRNA; cDNA DKFZp434B0650 (I	5.27	5.94
433658	L03678	Hs.156110	immunoglobulin kappa constant	4.78	3.07
452436	BE077546	Hs.31447	ESTs, Moderately similar to A46010 X-fin	4.68	3.27
413916	N49813	Hs.75615	apolipoprotein C-II	4.62	4.82
407825	NM_006152	Hs.40202	lymphoid-restricted membrane protein	4.55	3.12
406648	AA563730	Hs.277477	major histocompatibility complex, class	4.31	4.15
409060	A1815867	Hs.50130	necdin (mouse) homolog	4.23	3.44
401941			Target Exon	3.89	3.19
447471	AF039843	Hs.18676	sprouty (Drosophila) homolog 2	3.88	2.43
419628	H67546	Hs.49768	ESTs	3.66	4.16
414863	AW131473	Hs.106185	rat guanine nucleotide dissociation stim	3.63	2.81
423416	NM_004920	Hs.128316	apoptosis-associated tyrosine kinase	3.47	3.06
400275			NM_006513: Homo sapiens seryl-tRNA synth	3.47	3.43
426283	NM_003937	Hs.169139	kynureninase (L-kynurenine hydrolase)	3.42	1.96
442117	AW564964	Hs.128899	ESTs; hypothetical protein for IMAGE:447	3.41	2.89
411763	AW862589		gb:QV0-CT0387-180300-167-a07 CT0387 Homo	3.37	6.31
402007			C18000503: gij8922165[ref]NP_060080.1] h	3.34	3.74
424775	AB014540	Hs.153026	SWAP-70 protein	3.30	2.00
424036	AA770688		H2A histone family, member L	3.30	3.16
453464	A1884911	Hs.32989	receptor (calcitonin) activity modifying	3.30	5.58
401739			NM_005622: Homo sapiens SA (rat hyperten	3.30	3.23
440274	R24595	Hs.7122	scrapie responsive protein 1	3.27	2.47
413398	D21262	Hs.75337	nucleolar and coiled-body phosphoprotein	3.26	2.61
417165	R80137	Hs.302738	Homo sapiens cDNA: FLJ21425 fs, clone C	3.26	2.58
418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	3.14	4.04
436965	Z11894	Hs.156110	gb:H.sapiens rearranged mRNA for immunog	3.13	2.38
453857	AL080235	Hs.35861	DKFZP586E1621 protein	3.13	2.47
404405			Target Exon	3.11	4.69
413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	3.11	2.10
443247	BE614367	Hs.333893	c-Myc target JPO1	3.10	2.26
400417	X72475		Target	3.08	2.32
401512			NM_014080: Homo sapiens dual oxidase-like	3.07	2.87
423242	AL039402	Hs.125783	DEME-6 protein	3.06	2.78
417501	AL041219	Hs.82222	sema domain, immunoglobulin domain (Ig),	3.06	2.81
451952	AL120173	Hs.301663	ESTs	3.05	2.65
427419	NM_000200	Hs.177888	histatin 3	3.05	4.24
406663	U24683		immunoglobulin heavy constant mu	3.05	4.55
442104	L20971	Hs.188	phosphodiesterase 4B, cAMP-specific (dun	3.03	1.90
451993	AA765776	Hs.122983	ESTs	3.02	1.71
421097	A1280112	Hs.125232	Homo sapiens cDNA FLJ13266 fs, clone OV	3.01	3.11
430129	BE301708	Hs.233955	hypothetical protein FLJ20401	3.00	3.47
427700	AA262294	Hs.180383	dual specificity phosphatase 6	3.00	2.22
400237			NM_001087: Homo sapiens angio-associated	2.98	3.43
414063	H26904	Hs.75736	apolipoprotein D	2.97	5.76
426153	AF057169	Hs.182771	viteliform macular dystrophy (Best dise	2.94	2.38
414781	D50917	Hs.77293	KIAA0127 gene product	2.94	2.88
445823	A1478563	Hs.145519	FKSG87 protein	2.92	1.98
404439			ENSP00000067222: Mitochondrial 28S ribos	2.92	2.57
421218	NM_000499	Hs.72912	cytochrome P450, subfamily I (aromatic c	2.90	2.47
420350	AW406896	Hs.88269	Homo sapiens, clone MGC:17339, mRNA, com	2.90	3.87
424855	AW204725	Hs.25560	ESTs	2.89	2.61
436700	A1693690	Hs.301406	hypothetical protein PP3501	2.88	3.63

	451131	AI267586	Hs.268012	fatty-acid-Coenzyme A ligase, long-chain	2.87	2.92
	427157	U51166	Hs.173824	thymine-DNA glycosylase	2.87	2.11
	402273			Target Exon	2.87	2.48
5	414135	NM_004419	Hs.2128	dual specificity phosphatase 5	2.83	3.09
	430643	AW970065	Hs.287425	MEGF10 protein	2.83	3.04
	451979	F06972	Hs.27372	endothelial tyrosine kinase (Etk) (BMX)	2.82	2.12
	406642	AJ245210		gb:Homo sapiens mRNA for immunoglobulin	2.81	2.88
	407360	X13075		gb:Human 2a12 mRNA for kappa-immunoglobulin	2.81	3.43
	405441			Target Exon	2.80	3.15
10	450816	BE271927	Hs.87385	ESTs	2.80	2.48
	435675	AA694099	Hs.266820	ESTs	2.78	2.70
	426495	NM_001151	Hs.2043	solute carrier family 25 (mitochondrial)	2.78	2.53
	441623	AA315805		desmoglein 2	2.78	2.27
	413335	AI569936	Hs.296178	hypothetical protein FLJ22637	2.76	3.18
15	408527	AL135018	Hs.33074	Homo sapiens, clone IMAGE:3606519, mRNA	2.76	1.92
	437740	AA810265	Hs.122915	ESTs	2.76	1.88
	426322	J05068	Hs.2012	transcobalamin I (vitamin B12 binding pr	2.75	8.06
	411852	AA528140	Hs.107515	ESTs, Weakly similar to T00329 hypotheti	2.74	3.39
	428422	AI557280	Hs.184270	capping protein (actin filament) muscle	2.73	2.31
20	426793	X89887	Hs.172350	HIR (histone cell cycle regulation defec	2.72	2.19
	401454			NM_014226:Homo sapiens renal tumor anti	2.72	1.99
	436825	AW341123	Hs.120275	ESTs	2.72	2.89
	407705	AB023139	Hs.37892	KIAA0922 protein	2.72	2.48
25	416782	L35035	Hs.79886	ribose 5-phosphate isomerase A (ribose 5	2.72	2.63
	449151	AI632331	Hs.196038	ESTs	2.72	2.99
	433464	N92481		gb:zb12g02.s1 Soares_fetal_lung_NbHL19W	2.69	3.17
	401009			Target Exon	2.69	3.28
	427227	AF103803	Hs.283690	hypothetical protein	2.68	2.02
30	405268			ENSP00000223174:KIAA0783 PROTEIN.	2.67	2.18
	410295	AA741357		ridogen (enacin)	2.65	2.06
	435905	AW997484	Hs.5003	KIAA0456 protein	2.65	2.12
	430378	Z29572	Hs.2556	tumor necrosis factor receptor superfam	2.65	2.52
	457423	AK000642	Hs.265018	hypothetical protein FLJ20635	2.64	2.51
35	448752	AA593867	Hs.300842	KIAA1608 protein	2.63	2.20
	414931	AK000342	Hs.77646	Homo sapiens mRNA; cDNA DKFZp761M0223 (f	2.63	1.83
	441283	AA927670	Hs.131704	ESTs	2.62	1.92
	439352	BE614347	Hs.169615	hypothetical protein FLJ20989	2.60	2.21
	421391	AW304350	Hs.191958	immunoglobulin superfamily receptor tran	2.60	3.06
40	406678	U77534		gb:Human clone 1A11 immunoglobulin varia	2.54	3.06
	430278	AI673074	Hs.116567	ESTs, Weakly similar to T22914 hypotheti	2.49	3.44
	425970	AK001500	Hs.165186	hypothetical protein FLJ13852	2.47	3.46
	407363	AF035032	Hs.8997	gb:Homo sapiens clone MCA1L myosin-react	2.45	3.45
	408367	AK001178	Hs.44424	homolog of rat orphan transporter v7-3	2.44	3.52
45	420103	AA382259	Hs.95197	aldehyde dehydrogenase 1 family, member	2.44	6.15
	418635	L11329	Hs.1183	dual specificity phosphatase 2	2.42	3.92
	451558	NM_001089	Hs.26630	ATP-binding cassette, sub-family A (ABC1	2.41	3.08
	430354	AA954810	Hs.239784	human homolog of Drosophila Scribble	2.36	3.99
	405701			ENSP0000004954:Adseverin (Scinderin).	2.33	4.25
50	433427	AB16449	Hs.171889	cholinephosphotransferase 1	2.30	3.30
	401965			CGI-148 protein	2.29	3.45
	417866	AW067903	Hs.82772	collagen, type X, alpha 1	2.23	4.07
	428142	NM_001308	Hs.2246	carboxypeptidase N, polypeptide 1, 50kD	2.19	3.17
	422103	AA984330	Hs.111676	protein kinase H11; small stress protein	2.18	4.18
55	425746	NM_001701	Hs.159440	bile acid Coenzyme A: amino acid N-acyl	2.12	3.48
	404835			NM_018943:Homo sapiens tubulin, alpha-I	2.09	5.72
	401127			Target Exon	2.09	4.38
	406161			Target Exon	2.08	3.22
	421854	AW163267	Hs.106469	suppressor of var1 (S.cerevisiae) 3-like	2.08	3.03
60	406632	AB006838		gb:Homo sapiens mRNA for HRV Fab N31-VH,	2.07	3.25
	447940	D86982	Hs.20060	KIAA0229 protein	2.05	4.80
	411773	NM_006799	Hs.72026	protease, serine, 21 (testis)	2.05	5.33
	413211	AW967107	Hs.109274	hypothetical protein MGC4365	2.02	4.74
	425722	AI659076	Hs.97031	hypothetical protein MGC13047	2.01	3.76
65	437044	AL035864	Hs.69517	differentially expressed in Fanconi's an	1.96	5.27
	436420	AA443966	Hs.31595	ESTs	1.94	3.68
	414809	AI434699	Hs.77356	transferrin receptor (p90, CD71)	1.92	3.88
	423420	AI571364	Hs.128382	Homo sapiens mRNA; cDNA DKFZp76111224 (f	1.90	3.63
	427923	AW274357	Hs.301406	hypothetical protein PP3501	1.90	3.04
70	406652	AW150304	Hs.277477	major histocompatibility complex, class	1.88	3.00
	436524	AF218942	Hs.24689	formin 2	1.88	3.54
	436552	NM_014038	Hs.5216	HSPC028 protein	1.86	3.29
	408204	AA454501	Hs.43666	protein tyrosine phosphatase type IVA, m	1.86	3.78
	402728			C1002541:gb4758590[ref]NP_004249.1] im	1.86	3.14
75	420932	AW374605	Hs.11607	ESTs, Weakly similar to T21697 hypotheti	1.84	4.72
	458559	AW028820	Hs.283614	ESTs	1.78	3.06
	400278			ENSP00000243264:Dolichyl-diphosphodigos	1.76	3.55
	425751	T19239	Hs.1940	crystallin, alpha B	1.76	5.31
	420737	L08096	Hs.99899	CD70; tumor necrosis factor (ligand) s	1.74	3.00
	410006	AW732308	Hs.57783	eukaryotic translation initiation factor	1.74	3.79
80	454429	BE273437	Hs.301406	hypothetical protein PP3501	1.73	3.57
	426321	BE046490	Hs.180677	zinc finger protein 162	1.72	3.27
	402897			NM_023068:Homo sapiens sialoadhesin (SN	1.69	3.81
	423639	AB037826	Hs.130411	KIAA1405 protein	1.67	3.31

5	448848	AF131851	Hs.22241	hypothetical protein	1.65	4.27
	414420	AA043424	Hs.76095	immediate early response 3	1.60	3.02
	440747	AW297226	Hs.137840	ESTs, Moderately similar to SIX4_HUMAN H	1.56	3.28
	450635	AW403954	Hs.25237	mesenchymal stem cell protein DSCD75	1.55	3.73
	400252			NM_004651: Homo sapiens ubiquitin specif	1.55	3.26
	411825	AK000334		hypothetical protein FLJ20327	1.55	3.18
	414328	Z21666	Hs.300463	aconitase 2, mitochondrial	1.52	4.03
	400263			Eos Control	1.51	3.42
	421552	AF026692	Hs.105700	secreted frizzled-related protein 4	1.50	3.19
10	436673	AF201931	Hs.5268	hypothetical protein FLJ10479	1.49	3.33
	404739			Target Exon	1.49	3.10
	438344	BE387726	Hs.343411	DEAD/H (Asp-Glu-Ala-Asp/His) box polypep	1.46	3.42
	421696	AF035306	Hs.106890	Homo sapiens clone 23771 mRNA sequence	1.44	3.15
	425240	AA306495	Hs.1869	phosphoglucosylase 1	1.44	3.04
15	412099	U64198	Hs.73165	interleukin 12 receptor, beta 2	1.43	3.71
	434642	W25739		chromobox homolog 5 (Drosophila HP1 alpha	1.42	3.07
	404406			Target Exon	1.42	3.87
	433320	D60647	Hs.250879	ESTs, Highly similar to CTXN RAT CORTEX	1.41	3.80
	447697	W52125		tubulin alpha 1	1.40	4.45
20	415780	U75898	Hs.78846	heat shock 27kD protein 2	1.40	3.28
	447216	R75812	Hs.169248	p75NTR-associated cell death executor, o	1.39	3.77
	401772			NM_014520: Homo sapiens MYB binding prote	1.39	3.67
	413031	BE515051	Hs.75160	phosphotransferase, muscle	1.38	3.31
	435604	AA625279	Hs.26892	uncharacterized bone marrow protein BM04	1.37	3.17
25	428011	BE387514	Hs.181418	KIAA0152 gene product	1.37	3.05
	445580	AF167572	Hs.12912	skb1 (S. pombe) homolog	1.35	3.11
	436703	AW880614	Hs.146381	RNA binding motif protein, X chromosome	1.34	3.05
	438277	AL022326	Hs.6139	synaptogyrin 1	1.34	3.09
	451481	AA300228	Hs.295866	hypothetical protein DKFZp434N1923	1.32	3.23
30	421818	AW992976	Hs.50098	NM_002489: Homo sapiens NADH dehydrogenas	1.31	3.01
	412968	AW500508	Hs.75102	alanyl-tRNA synthetase	1.28	3.58
	452378	AA025855	Hs.19597	KIAA1694 protein	1.25	3.08
	447455	H38335	Hs.6750	Homo sapiens mRNA for FLJ00058 protein,	1.24	3.45
	402212			KIAA0430 gene product	1.21	3.03
35	428773	BE256238	Hs.193163	bridging integrator 1	1.20	3.20
	430067	U79458	Hs.231840	VW domain binding protein 2	1.18	3.03
	418289	AW403103	Hs.83951	Hermansky-Pudlak syndrome	1.17	3.32
	405752			Target Exon	1.00	3.40
40	422836	AL037365	Hs.194093	AKAP-binding sperm protein ropporin	1.00	3.00

TABLE 588:

Pkey: Unique Eos probeset identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

45	Pkey	CAT Number	Accession
	400275	18707_1	NM_006513 BC009390 X91257 BC000716 BM450041 BI771139 AV710955 AU120415 AU141179 AU121081 BE409287 AU141397 AU122238 BI256788 BE386217 AU143368 AU133780 AU139704 BG531086 BE268235 BE545230 AU143414 AV761720 AU129842 AU143343 BE270064 BG473378 BE298813 BI772360 BE617354 AU140124 BE277005 BG746716 BE814960 AW161287 AV762084 BG898985 AW674875 AA313975 AV749916 AA374328 BM011248 AU098465 AW238888 BG940091 BG284599 AW410037 AA378483 D49914 AL573323 AL549819 AL572282 AL572871 AL568117 AL571945 AL547790 AL581217 AL514659 AL573926 AL540816 AW410038 BI262249 BG284713 AI659394 AI093582 AW965846 AA652206 AI686014 AA654357 AU146982 AW273447 AW157715 AW574750 BG683509 AW887824 AJ818522 AA703770 BE542873 AA515504 AU154982 AA831254 AA828521 AI088602 AA854654 AA190869 BF062816 AA464944 BG261335 AI003584 BG402820 AA932098 W68695 AW182900 W37334 AI073864 C17924 C18528 AI299318 BF154399 BG319570 BF764242 BF764209 AI620320 TG0629 BF447193 F29285 AI548949 BI333775 BE743602 BE618230 BE268139 BF036434 BE562718 BG774381 AA659633 AA297649 AA010945 BG105512 BE268205 T32623 BG015679 AL518518 AL517118 AL538396 AI049861 AL581976 AV752041 W26586 BE181609 AI963016 BG057603 AI720256 AA844560 AA055570 BE619606 C17428 AI042174 N93945 N69743 BF795208 AW057940 BI091399 AW975179 AA909936 H28712 W65445 AL515439 W37117 H66514 T85737 W37369
50			AW862589 AW860959
	411763	1103041_1	NM_033445 BC001193 AI885781 BF794032 AA476620 AA819066 AA810905 AI291244 AI885097 AI359708 AI335629 H97396 AI344589 AA300377
55	424036	6226_1	AA457566 AW771833 BE465621 AI364068 AJ364452 AI648505 AI918342 AI928670 AA886580 AL531029 AA886344 AI186419 BG329096 BM045465 AL531028 BG437151 BE868021 AA179427
60	400237	9484_1	BC014122 M95627 NM_001087 BC020244 BC008809 AL542809 AL522027 AL517616 AL539615 AL555640 AL546094 AL528959 AL555071 BI858518 BI600907 AU120890 BE257146 AV707965 BI911155 BG575776 BE302876 BE277469 BE389232 AL533354 BE389814 BG829179 BE384687 BE276341 BG746912 BG425149 AL047913 BE250277 BG116066 AW410799 BG478074 BG471558 BF813165 AA016192 BG334833 BE383857 AA218784 AL517615 BI822297 BE677910 AW169102 AW410800 AU144298 AI251524 AW275306 AU147438 BE205773 AJ343920 AI972200 AA666173 AI568496 AA742466 AI075003 BE858669 BI789274 BI964722 AI310312 AI928567 F28593 BI962793 AA053407 AA603722 AI419246 AA705597 BF445723 AA441804 AA774757 BG152609 AI301244 BF058147 AI879460 AI470194 D80510 AA923557 W69781 AI301243 AI880348 AL517973 AL542808 BE300552 AA143563 AI567123 AA553412 AA547999 AW262497 AW027349 AW469464 BE300553 AI687352 BG222276 AU146833 AA847176 AA724639 AI868270 AL530431 AI583619 AI563298 BI857771 C00178 AW130086 AI312650 AI470187 AL577668 BF816236 BF815492 BE221500 W48859 T54102 AI828100 AW190156 AI961278 AL565165 BF966475 BM013215 BG109077 BF793617 AA381776 AA381486 BF916382 BE745391 AA330239 BG117939 BF337403 BG770295 AL567952 AL571817 BE832508 BF032720
65			AJ245210 AJ245212 AJ245211 AJ245213
	406642	0_0	BC022413 BE395396 BF754175 AA506621 BE706665 BE706678 AA723159 BE153169 BE706729 BE706558 BE153312 BE706706 AW371853
70	441623	3362_1	AW371849 BE153241 BC017410 AI37912 AI090244 AW090300 BE219837 AI623661 BE501576 BE501734 AJ742232 AI023964 AI458424 AA975373 AI288904 AI984583 AA890325 N32562 AI358102 AW241694 AI038448 AI672071 AI018389 AA576391 AA977874 AW189392 W37448 AA612894 AI277548 H89551 AI699774 H89365 AA315805 AW579186 BC014584 BC014581 AW780125 AI672414 BE328145 AW600919 BF031306 AW172758 BE708322 AA345675 BE875779 H28241 H25318 BF540913 BG179688 BF110202 AA528775 W37573 BE041644 AW366504 BM129522 BM129822 AI122760 BE718200 AW887496 AA149420 BE706307 BE539395 BE748765 AI373653 R75904 BF979185 BF691393 BG495595 BI094458 BE706702 BG496559 BF248373 BG494800
75			N92481 AW674508 AA593748 AW974058 AI475594
	433464	1015899_1	BG402852 BG545066 AA150252 AL036760 AA452480 AI033256 W68776 W93372 N31248 AI052219 AI367635 W69374 N88610 R58194 BI524854
80	410295	2817_1	BI497111 BF940043 AI129268 AI359798 AI056480 AA121421 AI042150 AW449003 AI418180 AI419420 AI356058 BF832243 AI349330 AI359448 W76647 BF477170 AA099163 BF994549 AW608256 AA045418 H03770 AL574791 AW069455 BE302148 AW022281 AW960273 AA121268 AI336371

5	406678	0_0	406632	0_0	400278	170_1	<p> A1989381 A1131425 A1147483 A1311537 AW338638 A1141649 AA709414 A1817177 AA780884 A1333805 AA045312 A1623918 A1349421 W63753  W70299 AA557276 AA299007 N98212 W74064 N24823 T54892 AA054724 W73059 A1869152 N93462 H71889 A1537432 R71628 AA303089 A1498550  T60941 AV706417 AW067848 A1150677 AW338118 A1336313 AA826256 A1139518 AA662948 AA902723 A1970175 W66882 A1089380 A1148372  H99951 AW183001 A1270317 AA532767 AA044727 AA931652 R82469 AA150261 W67788 H67495 R80715 AW149812 N78914 A1862034 W61122  AW023118 W69375 T88917 T47984 N21531 R35646 AA055544 H15534 AA688295 AA090586 AA044764 BF994641 R79547 N21313 BF674610  H02874 AW975323 R16904 AA328030 AA054671 R79546 BF832310 A1249109  U77534 U77537  AB006837 AB006837 AB006836 AB006834 AB006835  Y00281 NM_002950 BC010839 BC007955 BG675232 BM468552 AL565484 BG831516 BF035300 BG677277 BF852972 BE314901 BF850656  A1371816 AA292474 AA375747 AA308414 BM454544 B1333370 BM049921 B1461428 B1465007 B1223401 BE856245 AW821164 BF914775 BF914761  A1125835 B1222678 B1091137 BF340536 BM462798 B1224452 BG707915 AL569160 AA443815 AW572867 AW33410 BF739268 BG010283  B013120 BF818845 BF763468 AA305165 A1630370 AA039826 R24906 H02046 T95891 BF981330 AW936510 AA478169 H04587 BG166574  B1869342 BE562482 BE539637 AA165089 AL579118 AL553699 BE044054 AW117440 A1520674 BF435417 AW245648 A1852404 T29534 AU153459  AU152168 AW591591 AU146918 A1393187 AA478013 AU148143 A1224471 A1640728 A1871537 AW264752 N93787 A1189357 AV756134 A1471659  AU147466 AA779206 AU149419 AU149104 AU159135 AA312221 AW445119 AW021912 A1799771 F04407 A1285530 A1914643 AW068751 AA513325  AA164627 AA639285 AA569644 T96892 A1923594 BF439180 B1770936 BF032438 AU154884 AA682793 AW072992 A1158815 A1884444 AL048031  AU158922 AU152546 A1695187 AL048033 A1245650 AU148507 AW467451 BE536868 BF913001 BF062707 AL573082 AW067993 AA523254  BE886727 A1890705 AU159092 A182693 AU1817553 AA236729 A1687858 BG163767 A1524675 A1678155 AA127100 A126661 AU159718 A1469720  AA483627 AW131696 R26868 A1198885 AW875614 AW938694 AW578974 B1763988 BG819168 BE874767 BG978292 BE162948 AL555483  AW189719 T56783 A018819 A1476552 B1492837 A1824440 BG996262 AA932887 A1380726 R79530 AA622108 A1262575 T56782 R27437 BE784153  AW129649 A1675567 A1866759 BG987935  U44839 NM_004651 BC000350 A158316 AU117940 BG759024 BG749694 BE799505 BG831537 A1816335 AA325352 AL547005 AW157038 A1859331  A1816166 AU150786 AL043549 AW1162880 AU159233 A1143169 T03478 BE727648 AA764725 BE206603 A1369814 A184369 AW157545 BE221486  H99016 AU159025 A1074496 A1494516 BE245950 AA704385 AA280862 A1479595 A1369776 BE671398 T05538 AA682249 B1677303 BE645335  A1359434 H92868 D52599 D53609 D54715 T06015 BE222174 A1954706 D53218 D53787 R59889 W86896 A1497670 R70771 BF309414 BE620147  BG910597 AW964968 BE836120 AL579175 H56512 D55956 B1044097 AL555239 BF220278 AA081991 A1819544 AW001573 AW131600 A1858764  D52367 W22034 BG818979 BG024561 BE707279 B1458863 B1910399 BG707755 BF348284 H10055 B1086315 BE620574 H41088 BG119517 W23267  W21941 AA328817  AK000695 AK000489 BC001688 BG235988 AW006329 A1887644 A1207230 A1148213 A1304333 A1634653 AW662636 A1281247 AA946921 AA424487  BE727330 A1830588 AA159183 AA971741 BG231801 AA631793 AA975194 BF817537 AA477798 B1906631 AW083424 AA625199 NM_017767  AK000334 BF984048 AW815634 AL573992 AA430612 AA928390 AA644447 AW340827 AA424290 A1927759 BG951502 AW881353 B1765535  Z11692 X51466 NM_001961 M19997 B1224253 BG830478 A1122147 AU123437 BG113591 BG752624 BE886804 B1868669 BG337216 AW629935  BM016525 A1560409 AL562866 A1909178 BF849556 AA371735 BF038841 BF727115 BC006547 BG757526 AL555664 B1261304 BG770095 B1033486  B1517580 BG876486 B1011828 A1313235 BG831724 BF869862 BG988348 B1011834 BF886337 BF898627 BF092380 AW803215 F01241 BF805719  BG876487 AW498536 BF988866 BG998849 AA248724 BG829202 BG756456 BG032392 B1859287 BM016990 BG332369 BE933685 BE166758  BM452445 A1937808 AW026128 N23684 AW006041 A1337621 F33111 BF344301 BG105450 BG387343 BF569547 BF154671 BM007368 BF569385  BE772007 B1199487 BF761700 B1261519 BF944452 BF898506 A1038390 BM044934 AW381142 BG743618 BE769206 BE893973 B1015047 BF886479  BF761350 BE769769 BG766117 BF847365 BE397834 AW371121 BF089125 BE082996 BF183193 BG180964 BF089940 B1000274 BG255503  BG674499 BG774174 B1015084  AF147443 BM471094 AA948055 AA973157 AA284289 W25739 B1021926 BF898367 W02720 BF798341 BF378312 AA427766 BG955568 BF899591  BF684215  BE742621 AL528391 AA328484 W52125 AA321596 AA022458 AW971024 A1052029 A1761638 AA628498 BE619513 AA412069 A1027538 AW514954  A1884599 A1097362 A1499259 A1419408 AW469200 A1992152 A1142045 A1066572 A1275439 AA581877 A1347308 A1016726 A1127541 AW002064  A1141786 AW051842 A1355329 A1198198 A1347858 A1027870 A1039163 AA576695 A183286 A1362001 A1361994 AA594668 AA459257 AA745778  A1139667 F20651 A1201510 AA832171 BM464599 BM464574 A1972621 A1183887 AW131911 AW771584 BE619828 AA492218 AA025767 AA977354  AA385481 N45137 W73596 A1864400 A1200026 A1270953 F18139 W46301 H55825 A1039867 A1457570 A1928639 A1824685 A1083898 AW024570  AA285299 AW381097 AW582409 BE964181 </p>
10	406678	0_0	406632	0_0	400278	170_1	
15	406678	0_0	406632	0_0	400278	170_1	
20	406678	0_0	406632	0_0	400278	170_1	
25	406678	0_0	406632	0_0	400278	170_1	
30	406678	0_0	406632	0_0	400278	170_1	
35	406678	0_0	406632	0_0	400278	170_1	
40	406678	0_0	406632	0_0	400278	170_1	
45	406678	0_0	406632	0_0	400278	170_1	
50	406678	0_0	406632	0_0	400278	170_1	
55	406678	0_0	406632	0_0	400278	170_1	
60	406678	0_0	406632	0_0	400278	170_1	
65	406678	0_0	406632	0_0	400278	170_1	
70	406678	0_0	406632	0_0	400278	170_1	
75	406678	0_0	406632	0_0	400278	170_1	
80	406678	0_0	406632	0_0	400278	170_1	

TABLE 58C:

**Key:** Unique number corresponding to an Eos probeset  
**Ref:** Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) *Nature* 402:489-495.  
**Strand:** Indicates DNA strand from which exons were predicted.  
**NL\_position:** Indicates nucleotide positions of predicted exons.

Key	Ref	Strand	NL_position
401941	4982556	Plus	112022-112204
402007	7381786	Plus	143964-144081
401739	2982169	Plus	132194-132404
404405	7272262	Plus	83251-83415
401512	7622346	Plus	136399-136557
404439	7139680	Plus	55316-55585
402273	2979528	Plus	28990-29203,32299-32402,32474-32668
405441	7408124	Plus	100952-101283
401454	9186923	Minus	114659-114832
401009	8117391	Minus	83179-83304
405268	4156151	Minus	24404-24521
405701	4263751	Plus	93243-93364
401965	3126781	Minus	18239-18389,19921-20076
404835	6970743	Plus	85462-85684,88139-88287,90338-91018,9482
401127	8699701	Minus	88327-88458,96150-96266
406161	7144954	Plus	16666-16836
402728	9211639	Plus	3192-3569,4267-4728
402897	8570339	Plus	61939-62241,64304-64615,65140-65391
404739	8217493	Plus	42742-43671
404406	7329316	Minus	47543-47928
401772	9966243	Plus	183917-184042
402212	7689783	Minus	69382-69936
405752	9212305	Plus	91392-91528

TABLE 59A: ABOUT 201 GENES UPREGULATED IN MELANOMA METASTASES FROM PATIENTS WITH PROGRESSIVE DISEASE RELATIVE TO MELANOMA METASTASES FROM PATIENTS WITH LIMITED DISEASE

Table 59A lists about 201 genes upregulated in melanoma metastases from patients with progressive disease relative to melanoma metastases from patients with limited disease. Genes were selected from 59680 probesets on the Eos/Alfymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

- 5 Pkey: Unique Eos probeset identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: 90th percentile of AIs for metastases from patients with progressive disease divided by the 90th percentile of AIs for metastases from patients with limited disease  
 10 R2: 90th percentile of AIs for metastases from patients with progressive disease divided by the 90th percentile of AIs for metastases from patients with limited disease, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	8.58	13.77
448966	AW372914	Hs.86149	phosphoinositid 3-phosphate-binding prot	7.43	5.91
440099	AL080058	Hs.5909	DKFZP564G202 protein	7.07	4.56
431211	M86849	Hs.323733	gap junction protein, beta 2, 26kD (conn	6.91	3.51
420859	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	6.90	6.44
418067	AI127958	Hs.83393	cystatin E/M	6.62	10.34
422166	W72424	Hs.112405	S100 calcium-binding protein A9 (calgran	6.47	13.26
409632	W74001	Hs.55279	serine (or cysteine) proteinase inhibito	6.25	3.41
401780			NM_005557: Homo sapiens keratin 16 (foca	6.10	4.24
437191	NM_005846	Hs.331555	serine protease inhibitor, Kazal type, 5	5.97	6.60
422511	AU076442	Hs.117938	collagen, type XVII, alpha 1	5.89	3.57
412636	NM_004415		desmoplakin (DPI, DPII)	5.82	3.51
417124	BE122762	Hs.25338	ESTs	5.16	3.16
430686	NM_001942	Hs.2633	desmoglein 1	5.03	3.57
421733	AL119671	Hs.1420	fibroblast growth factor receptor 3 (ach	4.84	4.15
422192	AA305159	Hs.113019	Its485	4.79	4.59
407366	AF026942	Hs.17518	gb:Homo sapiens cig33 mRNA, partial sequ	4.33	2.37
429493	AL134708	Hs.145998	ESTs	4.28	4.79
458525	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	4.23	4.82
409010	AI648675		Homo sapiens, Similar to RIKEN cDNA 1700	4.23	3.69
410748	BE383816	Hs.12532	chromosome 1 open reading frame 21	4.11	2.33
409760	AA302840		gb:EST10534 Adipose tissue, white I Homo	4.06	3.65
424670	W61215	Hs.116651	epithelial V-like antigen 1	4.02	4.07
417366	BE185289	Hs.1076	small proline-rich protein 18 (cornfin)	3.97	4.71
418663	AK001100	Hs.41690	desmoadlin 3	3.95	5.08
402075			ENSP00000251056*: Plasma membrane calcium	3.93	5.85
428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	3.90	3.19
427809	M26380	Hs.180878	lipoprotein lipase	3.87	3.21
413859	AW992356	Hs.8364	Homo sapiens pyruvate dehydrogenase kina	3.85	5.75
431048	R50253	Hs.249129	cell death-inducing DFFA-like effector a	3.80	3.10
431369	BE184455	Hs.251754	secretory leukocyte protease inhibitor (	3.79	3.36
421485	AA243499	Hs.104800	hypothetical protein FLJ10134	3.67	3.35
429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	3.65	4.14
418686	Z36830	Hs.87268	annexin A8	3.65	3.62
448429	D17408	Hs.21223	calponin 1, basic, smooth muscle	3.64	3.18
422963	M79141	Hs.13234	ESTs	3.60	4.10
428874	W32133	Hs.194366	transferrin (prealbumin, amyloidosis I	3.58	3.97
401785			NM_002275: Homo sapiens keratin 15 (KRT1	3.58	5.05
454117	BE410100	Hs.40368	adaptor-related protein complex 1, sigma	3.56	1.92
419329	AY007220	Hs.288998	S100-type calcium binding protein A14	3.54	5.62
424012	AW368377	Hs.137569	tumor protein 63 kDa with strong homolog	3.53	4.70
417515	L24203	Hs.82237	ataxia-telangiectasia group D-associated	3.52	8.33
430376	AW292053	Hs.12532	chromosome 1 open reading frame 21	3.51	2.32
454229	AW957744	Hs.278469	lacrima proline rich protein	3.50	3.12
401781			Target Exon	3.45	3.57
408000	L11690	Hs.198689	bullous pemphigoid antigen 1 (230/240kD)	3.45	5.07
431567	N51357	Hs.260855	Homo sapiens cDNA: FLJ21410 fls, clone C	3.44	5.03
419648	T73661	Hs.91877	thyroid hormone responsive SPOT14 (rat)	3.42	7.72
414798	AI286323	Hs.97411	hypothetical protein MGC12335	3.41	2.65
442315	AA173992	Hs.7956	ESTs, Moderately similar to ZN91_HUMAN Z	3.41	5.03
442498	U54617	Hs.8364	Homo sapiens pyruvate dehydrogenase kina	3.32	2.86
410883	D43767	Hs.66742	CCL17 chemokine (TARC) (SCYA17)	3.28	3.18
418026	BE379727	Hs.83213	fatty acid binding protein 4, adipocyte	3.26	3.10
453309	AI791809	Hs.32949	defensin, beta 1	3.24	3.64
420783	AI659838	Hs.99923	lectin, galactoside-binding, soluble, 7	3.21	3.64
409601	AF237621	Hs.80828	keratin 1 (epidermolytic hyperkeratosis)	3.19	4.37
413163	Y00815	Hs.75216	protein tyrosine phosphatase, receptor I	3.16	5.48
452101	T60298	Hs.10844	Homo sapiens cDNA FLJ14476 fls, clone MA	3.15	3.60
412633	AF001691	Hs.74304	periplakin	3.15	3.98
407839	AA045144	Hs.161566	ESTs	3.15	4.11
427318	AF186081	Hs.175783	zinc transporter	3.11	3.58
427899	AA829286	Hs.332053	serum amyloid A1	3.10	3.53
421948	L42583	Hs.334309	keratin 6A	3.08	2.75
452744	AI267652	Hs.246107	Homo sapiens mRNA: cDNA DKFZp434E082 (fr	3.05	2.99
410001	AB041036	Hs.57771	kallikrein 11	3.04	3.02
413435	X51405	Hs.75360	carboxypeptidase E	3.00	2.40
428500	AI815395	Hs.184641	fatty acid desaturase 2	2.98	5.22
410099	AA081630		KIAA0036 gene product	2.97	2.05
437679	NM_014214	Hs.5753	inositol(myo)-1(or 4)-monophosphatase 2	2.93	3.45
413835	AI272727	Hs.249163	fatty acid hydroxylase	2.93	4.78

446068	AL049801	Hs.13649	Novel human gene mapping to chromosome 13	2.89	2.93
450680	AF131784	Hs.25318	Homo sapiens clone 25194 mRNA sequence	2.88	3.14
428398	AI249368	Hs.98558	ESTs	2.88	2.05
417433	BE270266	Hs.82128	ST4 oncofetal trophoblast glycoprotein	2.86	2.12
427919	AA173942	Hs.326416	Homo sapiens mRNA; cDNA DKFZp564H1916 (f	2.84	2.98
412676	NM_000165	Hs.74471	gap junction protein, alpha 1, 43kD (con	2.83	2.82
428695	AI355647	Hs.189999	purinergic receptor (family A group 5)	2.83	2.37
446989	AK001898	Hs.16740	hypothetical protein FLJ11036	2.82	2.73
428471	X57348	Hs.184510	stratelin	2.79	3.31
416305	AU076628	Hs.79187	coxsackie virus and adenovirus receptor	2.79	3.72
433147	AF091434	Hs.43080	platelet derived growth factor C	2.77	1.70
412326	R07566	Hs.73817	small inducible cytokine A3 (homologous	2.76	2.18
425787	AA363867	Hs.155029	ESTs	2.75	2.42
450172	NM_005864	Hs.24587	signal transduction protein (SH3 contain	2.75	2.36
421773	W69233	Hs.112457	ESTs	2.73	5.59
408536	AW381532	Hs.135188	ESTs	2.73	5.17
437143	AW204056	Hs.8917	ESTs	2.72	1.84
452862	AW378065	Hs.8687	ADAMTS2 (a disintegrin-like and metallo	2.70	1.82
418394	AF132818	Hs.84728	Kruppel-like factor 5 (intestinal)	2.69	4.62
410325	AB023154	Hs.62264	KIAA0937 protein	2.69	2.32
447164	AF026941	Hs.17518	viperin; similar to inflammatory respon	2.69	3.74
444984	H15474	Hs.132898	fatty acid desaturase 1	2.67	2.36
434727	H43374	Hs.7890	Homo sapiens mRNA for KIAA1671 protein,	2.65	1.78
420876	AA918425	Hs.177744	ESTs	2.64	7.26
426106	AI678765	Hs.21812	ESTs	2.64	2.51
419517	AF052107	Hs.90797	Homo sapiens clone 23620 mRNA sequence	2.64	2.66
409509	AL036923	Hs.322710	ESTs	2.62	2.09
426354	NM_004010	Hs.169470	dystrophin (muscular dystrophy, Duchenne	2.62	2.68
432503	AA551196	Hs.188952	ESTs	2.62	4.64
409341	AI963376	Hs.12532	chromosome 1 open reading frame 21	2.62	1.74
421116	T19132	Hs.101850	retinol-binding protein 1, cellular	2.62	2.90
456247	R09746		gby27d10.r1 Soares fetal liver spleen	2.61	3.43
414217	AI309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fis, clone L	2.60	3.84
439706	AW872527	Hs.59761	ESTs, Weakly similar to DAP1_HUMAN DEATH	2.58	3.49
440659	AF134160	Hs.7327	claudin 1	2.57	3.97
459710	AI701596	Hs.121592	ESTs	2.57	3.59
430937	X53463	Hs.2704	glutathione peroxidase 2 (gastrointestin	2.56	3.35
433882	U90441	Hs.3622	procollagen-proline, 2-oxoglutarate 4-di	2.51	3.75
427666	AI791495	Hs.180142	calmodulin-like skin protein (CLSP)	2.51	3.02
431103	M57399	Hs.44	pleiotrophin (heparin binding growth fac	2.47	3.53
449550	AA353125	Hs.184721	ESTs	2.43	4.22
424675	NM_005512	Hs.151641	glycoprotein A repetitions predominant	2.40	6.22
442060	H38671	Hs.8071	KIAA0735 gene product; synaptic vesicle	2.38	3.14
427122	AW057736	Hs.323910	HER2 receptor tyrosine kinase (c-erb-b2,	2.36	3.59
420039	NM_004605	Hs.94581	sulfotransferase family, cytosolic, 2B,	2.36	2.91
412477	AA150864		microsomal glutathione S-transferase 1	2.34	4.15
450693	AW450461	Hs.203965	ESTs	2.32	3.93
406433			Target Exon	2.29	3.20
423017	AW178761	Hs.227948	serine (or cysteine) proteinase inhibitor	2.24	4.40
422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	2.23	4.87
421314	BE440002	Hs.186034	Homo sapiens, clone IMAGE:4183312, mRNA,	2.23	4.22
422083	NM_001141	Hs.111256	arachidonate 15-epxygenase, second typ	2.22	5.71
442503	AF147078	Hs.150853	p53-responsive gene 5	2.21	4.86
418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	2.19	3.90
442572	AI001922	Hs.135121	hypothetical protein FLJ22415	2.16	2.87
413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	2.13	3.27
414521	D28124	Hs.76307	neuroblastoma, suppression of tumorigeni	2.09	5.28
428899	AA744610	Hs.194431	palladin	2.08	3.76
417079	U65590	Hs.81134	interleukin 1 receptor antagonist	2.06	3.09
439496	BE616501	Hs.32343	Homo sapiens, Similar to RIKEN cDNA 1110	2.05	2.88
450423	AA486735	Hs.31869	slit/adhesin	2.02	3.04
444105	AW189097		ESTs	2.01	3.05
430410	AF099144	Hs.347933	tryptase beta 1	2.01	3.71
409453	AI885516	Hs.95612	ESTs	2.01	4.34
429655	U48959	Hs.211582	myosin, light polypeptide kinase	2.00	5.28
432374	W68815	Hs.301885	Homo sapiens cDNA FLJ11346 fis, clone PL	1.99	3.59
447990	BE048821	Hs.20144	small inducible cytokine subfamily A (Cy	1.92	4.16
451541	BE279383	Hs.26557	plakophilin 3	1.89	3.90
425206	NM_002153	Hs.155109	hydroxysteroid (17-beta) dehydrogenase 2	1.89	3.29
410197	NM_005518	Hs.59889	3-hydroxy-3-methylglutaryl-Coenzyme A sy	1.84	3.04
401760			Target Exon	1.84	3.32
427579	AA366143	Hs.179669	hypothetical protein FLJ20637	1.83	4.69
424263	M77640	Hs.1757	L1 cell adhesion molecule (hydrocephalus	1.83	2.96
452208	AA024792	Hs.31895	hypothetical protein MGC4093	1.82	3.70
420074	AA253425	Hs.190074	ESTs	1.81	2.90
429299	AI620463	Hs.347408	hypothetical protein MGC13102	1.79	3.65
427540	R12014	Hs.20976	ESTs	1.77	2.92
429259	AA420450	Hs.292911	Plakophilin	1.76	3.65
422106	D84239	Hs.111732	Fc fragment of IgG binding protein	1.75	4.06
453556	AA425414	Hs.33287	nuclear factor I/B	1.74	3.07
436895	AF037335	Hs.5338	carbonic anhydrase XII	1.73	3.22
406851	AA609784		major histocompatibility complex, class	1.73	3.96
444726	NM_006147		interferon regulatory factor 6	1.71	3.65

5	444781	NM_014400	Hs.11950	GPI-anchored metastasis-associated prote	1.71	4.13
	446051	BE048061	Hs.37054	ephrin-A3	1.68	3.61
	408522	AI541214	Hs.46320	Small proline-rich protein SPRK (human,	1.67	3.00
	450835	BE262773	Hs.25584	hypothetical protein FLJ10767	1.66	3.11
	432004	BE018302	Hs.2894	placental growth factor, vascular endoth	1.66	3.23
	431179	AI338644	Hs.195432	aldehyde dehydrogenase 2 family (mitocho	1.64	3.29
	415213	NM_002933	Hs.78224	ribonuclease, RNase A family, 1 (pancrea	1.57	3.94
	423184	NM_004428	Hs.1624	ephrin-A1	1.56	2.88
	414694	NM_015362	Hs.76907	HSPC002 protein	1.56	2.92
10	458746	AI380797	Hs.158992	ESTs	1.56	2.92
	433091	Y12642	Hs.3185	lymphocyte antigen 6 complex, locus D	1.55	3.75
	433677	N79688	Hs.204354	ras homolog gene family, member 8	1.54	4.56
	403903			CS001632: g[10645308]b[AAG21430.1]AC00	1.53	3.99
15	445656	W22050	Hs.21299	ESTs, Weakly similar to AF151840.1 CGI-8	1.52	3.16
	443604	C03577	Hs.9615	myosin regulatory light chain 2, smooth	1.50	4.25
	429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	1.50	3.35
	415274	AF001548	Hs.78344	myosin, heavy polypeptide 11, smooth mus	1.49	3.21
	418226	AA424202	Hs.83834	cytochrome b-5	1.49	3.90
20	454194	BE141599		gb:OV2-HT0083-071299-018-h01 HT0083 Homo	1.48	2.95
	434879	M34572	Hs.159263	collagen, type VI, alpha 2	1.46	3.26
	418400	BE243026	Hs.301989	KIAA0246 protein	1.46	4.00
	409178	BE393948	Hs.50915	kalikrein 5	1.45	2.94
	433662	W07162	Hs.150826	RAB25 RAB25, member RAS oncogene family	1.44	3.18
25	429002	AW248439	Hs.2340	junction plakoglobin	1.43	3.07
	422087	X58968	Hs.111301	matrix metalloproteinase 2 (gelatinase A	1.40	4.61
	452934	AA581322	Hs.4213	hypothetical protein MGC16207	1.38	3.11
	417483	BE549343	Hs.82208	acyl-Coenzyme A dehydrogenase, very long	1.37	4.32
	427929	BE613835	Hs.181159	Homo sapiens mRNA; cDNA DKFZp434F0217 (I	1.37	2.99
30	425184	BE278288	Hs.155048	Lutheran blood group (Aubergier b antigen	1.36	3.17
	407143	C14076	Hs.32329	EST	1.36	2.99
	416950	AL049798	Hs.80552	dermatopontin	1.35	3.39
	406799	AA908548		gb:og83g12.s1 NCI_CGAP_Ov8 Homo sapiens	1.34	3.17
	442599	AF078037	Hs.324051	RelA-associated inhibitor	1.33	3.30
35	413659	BE155647		gb:PM2-HT0353-130100-002-e09 HT0353 Homo	1.32	2.89
	454478	AW805749		superoxide dismutase 2, mitochondrial	1.30	3.50
	404467			Target Exon	1.29	3.57
	452516	AA058630	Hs.29759	RNA POLYMERASE I AND TRANSCRIPT RELEASE	1.28	3.00
	412524	AA178113	Hs.44208	hypothetical protein FLJ23153	1.27	3.05
40	422354	U20982	Hs.1516	insulin-like growth factor-binding prote	1.24	2.86
	406711	N25514	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.24	3.29
	450796	NM_001988	Hs.25482	envoplakin	1.23	3.21
	431526	Y10129	Hs.258742	myosin-binding protein C, cardiac	1.23	3.65
	452791	AA227581	Hs.30634	hypothetical protein FLJ20509	1.22	2.90
45	406742	AI688091	Hs.279860	tumor protein, translationally-controlled	1.19	3.47
	406712	M31212	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.18	2.91
	443672	AA323362	Hs.9567	butyrobetaine (gamma), 2-oxoglutarate di	1.10	3.50
	413048	M93221	Hs.75182	mannose receptor, C type 1	1.00	2.99
	453165	S74727	Hs.32042	aspartacylase (aminoacylase 2, Canavan	1.00	2.91

TABLE 598:

Pkey: Unique Eos probest identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

55	Pkey	CAT Number	Accession
	412636	1438_1	M77830 NM_004415 AF139065 BG681115 BG740377 B1712964 BG000656 AA128470 BI438324 H27408 BE931630 BE167165 AW370827 AW370813
60			J05211 BG698865 BG740734 BG680618 BG739778 B1765807 BM353403 BM353248 AW177784 AW205789 AW951576 AW848592 BE182164
			BF149266 BE940187 BI060445 BI060444 BF350983 BE720095 BE720069 BE715154 BE082584 BE082576 BE004047 AA857316 BI039774 BE713818
			BE713548 AW170253 BE160433 BI039775 AW886475 BM462504 BE931734 BF149264 AA340777 BF381183 BG621737 AU127260 AW364859
			BF933352 BG223489 BE819009 BF381184 BE715956 R58704 AA852212 AW366566 BI090358 BF087707 BE819046 BE819005 AA377127 BE073467
			BE819069 BE819048 BI036306 BG990973 BI040954 BF919911 AU140155 AI951766 AI434518 AW804674 BF752963 BE837009 BE925826 BF149265
			AW959515 BE814264 BI039782 AU140407 BE144243 BE709863 BF985642 BE001923 BF933510 AW265328 BG436319 BE182166 AW365175
			AW847688 BE818280 AW177933 BF873679 AW178000 BE082526 BF476866 BF086994 BF592276 BE082507 BE082514 BE082505 BF873693
65			AW068840 AW847678 BF904153 AW365157 BE813930 BE002030 AW365153 BE184941 BF749421 BE184920 BF839562 BE184933 BF842254
			BE698470 BE931048 BF998889 BF368816 BE184924 BE159646 BE714632 BE184948 BG986845 AA131128 AA099891 W39488 CD4715 BF096124
			BE865341 AW799304 AL603116 BE149760 BE705967 BE705966 BE705968 AW848723 AW376699 AW376817 AW376697 BG005097 BF751115
			BE696084 AW848371 AW376782 AW848789 AW849070 W361413 BF927725 BF094211 AW997139 BE865474 BE185187 BE156621 BE715089
			BE713297 BE713298 BE179915 AW799309 BF872345 BF088676 BE705939 AW752599 BG005197 BF350086 BE715196 BE715155 BF752396
70			BF093817 BF831190 BF752409 BE006561 BG959922 BF094833 BF094748 BF094583 AW377699 AW607238 BE082519 AW590975 BI791553 AI700963
			AI190590 AI554403 AI392926 AU158477 BI467252 AU159919 AI760816 BF082516 AA439101 AA451923 AI340326 AI590975 BI791553 AI700963
			AI142882 AA039975 AA946936 AA644381 BM314884 AA702424 AI417612 AW190555 AI220573 AI304772 AI270345 AI627383 AA552300 AI911702
			AW166807 AI346078 W95070 AA149191 AA026864 AI830049 AW780435 AI078449 AI819984 AI858282 BI468588 AI860584 AI025932 AA026047
75			AA703232 AA656154 AA515500 AW192085 AA918281 T77861 AI927207 AI205263 BF082491 AW021347 AI568096 BE939862 AA088866 D12062
			AA056527 AA782109 W19287 W02156 AW150038 AA022701 T87181 H44405 AI910434 BF082513 AI494069 AI270027 AI635878 AA128330
			BG681425 BE706078 R20904 BG680059 BG676647 BF784409 AA026654 AV745530 BI762796 BG287391 AW798780 BE706045 BE926470
			AW799118 BF087996 BE002273 AW879451 AI571075 BE067786 AV721320 AI022862 N29754 C03378 N84767 AA131077 H30146 BE714290
			AI686869 AI568892 AI915596 AW105614 AI887258 AI538577 BE926474 BE067737 BG319486 AA247685 AW798883 AW103521 BF999173
			AW860878 BE939707 BE185750 BE714064 BE713903 BE713868 BE713763 BG950164 BE713810 AW365151 BG955489 BE005272 BF915937
80			AW365148 AI906927 BF992780 AW853812 BG954443 BI770853 BG679406 BG740832 BG681087 BG698430 AA455100 T87267 BE696209 BE696210
			BI089483 BE006273 BE872225 AW391912 BE925515 BG677012 BG741970 AA026480 BE705999 BG677157 BE009090 BG681378 BE712291
			BG961498 BG678984 BI040941 AA337270 AW384371 AW847442 BI058659 BE813665 W95048 W25458 AW177786 AA025851 BE931733 BF154837
			BG949393 BE714441 AW996245 BE711801 AI284090 BE064323 BE719390 BE940148 BG991212 BF375714 BF349522 BG996267 T48793 BI013292
			BE001925 AW365156 AW365154 AW608653 BF763109 BE931637 BE167181 BE713879 BF354008 BF678726 H90899 AW365145 W38382 AA948487



409010	10331_1	AL575207 AL551714 BM014781 BG542853 BG771232 AA429722 AJ377511 AJ770155 AA716665 BG003427 AA810811 AA442760 AA128510 AA059411 AJ796263 AJ494075 AJ572127 AA420992 BF436083 AJ648675 AA878813 BJ488614 BG700886 AA128609 AV702879 AA731146 AJ580336 AJ373224 AA919169 AJ758175 AA976350 BG701414 BF057794 AW135598 AA062583 B1549631 AJ185077 AA933379 AW024454 AA193289 AA045194 BG928396 BE856883 BF435859 AA196423 AW237471 R99289 D61992 BE856637 BF368270 AA194235 N51319 AA383499 N63065 BG548812 BF027898 BG779448
409760	865166_1	AA302840 T93016 T92950 AU184997 AA077551
410099	16732_1	AK055674 AW965247 AV751598 AA290926 R53043 AA331387 AK056148 B1917678 BG819395 BG911971 BG820167 AJ174254 AA348720 AA364503 BG714279 AW893230 AA081774 H24222 AV772176 BF875715 AA081630 BE000834 AA334880 AL563737 BG029709 W52882 AJ439658 BE551237 AA283724 BF109530 AJ457096 AJ805392 BE467736 AA693467 AJ697593 AJ887853 AJ167419 AW901980 AW901768 BE702179 AA484549 T23811 BE327043 AA716027 AA917004 AA167714 BF339675 AA084618 AJ18634 T31586 AA436630 AJ366472 AA706191 AJ422304 AJ204899 AJ041169 AA211402 AW827081 AA788593 T32735 AJ767935 AA747914 T03534 AW959843 AL119527 BE327037 AW901982 AW993370 AW901977 AW902071 W60090 N79906 D52685 T07735 BE702069 BE702172 T08671 BE767121 BE767117 BE767113 R10170 R09746
456247	2142387_1	AJ220117 AJ857837 AJ218371 BM091400 AJ304954 AJ198508 AJ400738 AW571549 AW950042 AJ089943 AA437280 AU150878 BF197070 AJ267984
412477	8669_2	BF594181 BF196688 AJ433152 AJ338921 AJ520364 AJ280197 AA652531 AJ674938 AJ342447 AJ620350 AJ281295 AJ148621 N54787 AJ338121 AJ281153 N51899 AJ087072 AA954788 AW069054 AJ346309 BG529629 AJ340135 BF083036 AJ167365 AW819657 AA935458 AJ467868 AW148701 AJ383720 BE047685 AW015498 AA937149 AJ4078346 AW771478 AW802508 H53334 AW389204 AW798230 AJ553922 AJ560688 AW950043 AJ961682 AJ706506 R01853 AJ126514 N62757 AJ536893 AJ926052 AJ18720 N99964 AJ568933 AJ915737 AJ080691 AJ185358 N48996 N68575 H82824 H50037 AJ247247 T95664 BF593863 AJ749637 AW088541 AA991294 AA887452 AJ073726 AA633132 AA629674 AA629649 AA629656 AA578595 AJ168758 AA804572 AJ085786 AA994396 AA991209 AA948663 AA929054 AA927952 T87001 AA928210 AA629296 AW802267 AW384129 BF744400 AA194110 AJ382839 AA194837 AA406284 AJ250750 R37035 AJ525586 W01244
444105	649788_1	AW189097 AJ123917 AJ123926
406851	0_0	AA609784 R97304
444726	3503_2	BG285809 BE940673 BG432524 BE157554 BG676980 AU144284 AJ745383 AU159045 AJ693500 AW293668 AW371408 BE856107 AJ138042 AW188320 AJ588246 BE673290 AW297653 AA156532 AJ017342 AJ916754 AJ190644 AJ184302 AA857671 BE857018 AJ307420 AJ318157 AW204327 AW664668 AW274339 AA582788 AJ345741 AW301433 AJ873468 AW137388 BF178731 BF178413 AA877495 BF001575 AJ824693 AW849604 AW849405 AW849396 AW849173 BE673179 AJ511327 AA705753 BE715478 AW849414 AW849399 AJ085759 AJ140849 T67412 AJ898885 AW104647 AJ912495 AJ089874 AJ744241 BE717113 BE717108 BE715564 AJ872527 AA029457 C00338 AJ469558 BE715577 AA045413 BF843813 BE141599 AW845896 AW178095 BE140914 BE140909 AW178107 AW178094 AW845883 BF349267 AW845898 AW845811 AW845814 BF767720 AA908548
454194	171445_1	BE155647 BE155627
406799	0_0	AW796921 AW798102 AW805879 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538
413659	1526081_1	
454478	4273_16	

TABLE 59C:

Pkey:	Unique number corresponding to an Eos probe set
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
Strand:	Indicates DNA strand from which exons were predicted.
NL_position:	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
401780	7249190	Minus	28397-28617,28920-29045,29135-29296,2941
402075	8117407	Plus	121907-122035,122804-122921,124019-12416
401785	7249190	Minus	165776-165996,166189-166314,166408-16656
401781	7249190	Minus	83215-83435,83531-83656,83740-83901,8423
406433	9256507	Plus	58094-58565
401760	9929699	Plus	83126-83250,85320-85540,94719-95287
403903	7710671	Minus	101165-102597
404467	8077630	Minus	24951-25853

TABLE 60A: ABOUT 53 GENES UPREGULATED IN BENIGN NEVI RELATIVE TO NORMAL TISSUES

Table 60A lists about 53 genes upregulated in benign nevi relative to normal tissues. These genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probe set obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey:	Unique Eos probe set identifier number
ExAccn:	Exemplar Accession number, Genbank accession number
UnigenelD:	Unigene number
Unigene Title:	Unigene gene title
R1:	average of benign nevi AIs divided by the 90th percentile of normal tissue AIs
R2:	average of benign nevi AIs divided by 90th percentile of normal tissue AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

Pkey	ExAccn	UnigenelD	Unigene Title	R1	R2
430377	NM_001922	Hs.301865	dopachrome tautomerase (dopachrome delta	8.69	5.62
409601	AF237621	Hs.80828	keratin 1 (epidermolytic hyperkeratosis)	8.37	13.47
430686	NM_001942	Hs.2633	desmoglein 1	7.26	4.78
406964	M21305		FGFES predicted novel secreted protein	6.50	3.73
426555	NM_000372	Hs.2053	tyrosinase (oculocutaneous albinism 1A)	6.40	7.35
429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	6.23	8.85
430822	AJ005371	Hs.248017	glycerate dehydro-3-phosphate dehydrogenase	5.49	4.32
420208	BE276055	Hs.95972	silver (mouse homolog) like	5.45	9.84
431360	NM_000427	Hs.251680	loricrin	3.88	3.00
421773	W69233	Hs.112457	ESTs	3.80	9.04
438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	3.74	4.23
431089	BE041395		ESTs, Weakly similar to unknown protein	3.21	2.34
420798	W93774	Hs.99936	keratin 10 (epidermolytic hyperkeratosis)	3.08	3.20
442503	AF147078	Hs.150853	p53-responsive gene 5	2.88	5.01
405451			dihydropyrimidinase-like 3	2.88	2.85
452240	AI591147	Hs.61232	ESTs	2.86	1.90
402525			NM_002699: Homo sapiens POU domain, clus	2.78	2.72
413171	AA318325	Hs.75219	tyrosinase-related protein 1	2.65	5.58
439496	BE616501	Hs.32343	Homo sapiens, Similar to RIKEN cDNA 1110	2.55	3.18
422656	AI870435	Hs.1569	LIM homeobox protein 2	2.45	2.38



256126  
40300  
129501  
113245  
112095  
175061  
1192352  
1787  
10043  
271411  
301406  
533379  
298184  
21858  
159581  
27862  
115803  
187461  
26468  
279175  
241493  
273790  
5912  
166017  
161757  
158287  
24907  
161851  
301406  
123164  
25734  
20478  
174051  
67846  
210  
278283  
40527  
47448  
49344  
30743  
20034

NM\_024638: Homo sapiens hypothetical prot  
C1002500.gi6754254[ref]NP\_034610.1[he  
C4000447.gi7705570[ref]NP\_038851.1[k  
baculoviral IAP repeat-containing 7 (liv  
calpain 3, (p94)  
ESTs  
cytochrome c-1  
Homo sapiens cDNA: FLJ22105 fts, clone H  
KIAA0455 gene product  
NM\_005311: Homo sapiens nuclear receptor  
NM\_002463: Homo sapiens myxovirus (intu  
Target Exon  
hypothetical protein DKFZp434F1819  
NM\_021158: Homo sapiens protein kinase d  
macrophage myristoylated alanine-rich c  
ESTs  
ENSP00000174317: KIAA0303 (FRAGMENT)  
Target Exon  
proteolipid protein 1 (Petzaeus-Merzbac  
C4001432.gi6009515[kb]BAA84941.1[AB  
gb:Human F.variable segment 5' to antiH  
hypothetical protein FLJ13074  
beta-site APP-cleaving enzyme 2  
hypothetical protein PP3501  
eukaryotic translation initiation factor  
C12001707.gi7305215[ref]NP\_038599.1[k  
gb:yb5912.s1 Stratagene ovary (937217)  
potassium voltage-gated channel, shaker-  
trinucleotide repeat containing 3  
phosphoserine aminotransferase  
matrix metalloproteinase 17 (membrane-in  
AIM-1 protein  
hypothetical protein  
ESTs, Weakly similar to C29149 protine-r  
amyloid beta (A4) precursor protein-bind  
ESTs  
C7002129.gi3638957[gb]AAC36301.1[ACO  
Target Exon  
natural killer-tumor recognition sequenc  
zona pellucida glycoprotein 3A (sperm re  
Eos Control  
Target Exon  
F-box only protein 7  
microphthalmia-associated transcription  
Target Exon  
ESTs  
KIAA0468 gene product  
coronin, actin-binding protein, 2B  
ESTs  
Target Exon  
gb:Human mRNA for pre-mRNA splicing fact  
Target Exon  
NM\_022355: Homo sapiens putative dipeptid  
hypothetical protein PP3501  
gb:501275386F1 NIH\_MGC\_20 Homo sapiens c  
gb:TCBAP1E1967 Pediatric pre-B cell acut  
cabin 1 (non-muscle)  
ESTs  
Target Exon  
ESTs, Weakly similar to BING1 [H.sapiens  
ceroid-lipofuscinosis, neuronal 2, late  
small nuclear ribonucleoprotein 70kD pol  
leukocyte immunoglobulin-like receptor,  
gb:yd60406.r1 Soares fetal liver spleen  
leukocyte tyrosine kinase  
G protein-coupled receptor 27  
ESTs  
ENSP00000034663: Zinc finger protein 131  
ESTs  
hypothetical protein FLJ11006  
NM\_022490: Homo sapiens hypothetical prot  
preferentially expressed antigen in mela  
Homo sapiens mRNA full length insert cDN

† Eos probeset identifier number  
cluster number  
nk accession numbers

Accession  
BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA6211  
AA136653 AA136656 AW450979 AA984358 AA809054 AW238038 AA492  
BG207209 BE166299 AJ204995 BG199355 AW969908 AA528756 AW440

453317	NM_002277	Hs.41696	keratin, hair, acidic, 1	2.34	3.76
420783	AJ559338	Hs.99923	lectin, galactoside-binding, soluble, 7	2.33	2.43
422511	AJ076442	Hs.117938	collagen, type XVII, alpha 1	2.28	2.00
427666	AJ791495	Hs.180142	calmodulin-like skin protein (CLSP)	2.28	2.50
459702	AJ204995		gb:an03c03.x1 Stratagene schizo brain S1	2.25	1.85
451668	Z43948	Hs.326444	cartilage acidic protein 1	2.23	2.42
431703	AA514264	Hs.4437	triosephosphate isomerase 1	2.15	2.20
453511	AL031224	Hs.33102	AP-2 beta transcription factor	2.13	2.20
401780			NM_005557: Homo sapiens keratin 16 (foca	2.13	2.02
416640	BE262478	Hs.79404	neuron-specific protein	2.11	2.02
444105	AW189097		ESTs	2.11	1.46
428748	AW593206	Hs.98785	Ksp37 protein	2.09	1.52
418067	AJ127958	Hs.83393	cystatin E/M	2.09	2.32
417017	AA976064	Hs.180842	ribosomal protein L13	2.08	2.52
401781			Target Exon	2.02	2.03
407178	AA195651		AP-2 beta transcription factor	1.88	2.17
452308	AI167560	Hs.61297	ESTs	1.84	2.38
429348	AJ242859	Hs.199731	Langerhans cell specific c-type lectin	1.83	3.26
402880			Target Exon	1.69	2.10
434276	AF123659	Hs.93605	leucine zipper, putative tumor suppressor	1.69	2.20
401963			NM_006311: Homo sapiens nuclear receptor	1.66	2.02
424010	AL080188	Hs.137556	Homo sapiens mRNA; cDNA DKFZp434A132 (fr	1.65	2.06
432800	BE391046	Hs.278962	AIM-1 protein	1.61	2.83
400328	X87344		transporter 2, ATP-binding cassette, sub	1.57	2.27
412580	AA113262	Hs.17901	Homo sapiens, clone IMAGE:3937015, mRNA,	1.55	2.42
435292	N20514	Hs.172965	ESTs	1.53	2.21
408561	AJ308037	Hs.84120	hypothetical protein MGC13016	1.52	2.01
427923	AW274357	Hs.301408	hypothetical protein PP3501	1.47	2.71
447763	BE619911	Hs.115803	hypothetical protein	1.40	2.10
454478	AW805749		superoxide dismutase 2, mitochondrial	1.30	2.36
427289	AJ07346		phosphoserine aminotransferase	1.24	2.02
430513	AJ012008	Hs.241586	G6C protein	1.20	2.18
411388	X72925	Hs.69752	desmocollin 1	1.00	2.43

TABLE 60B:

Pkey:	Unique Eos probeset identifier number
CAT number:	Gene cluster number
Accession:	Genbank accession numbers

TABLE 60C:

Pkey	CAT Number	Accession
431089	125941_2	BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826
459702	539529_1	BG207209 BE166299 AJ204995 BG199355 AW969908 AA528756 AW440776 B1044354
444105	649788_1	AW189097 AJ123917 AI123926
401788	683007_1	AW235123 AA195651
454478	4273_16	AW796921 AW798102 AW805749 AW805872 BF885060 AW794380 BF380449 AW794466 AW794538
427289	1820_2	BC007350 BG766159 BG769338 BG761999 BG744385 BG770572 AW370510 AW370581 AA978353 AW32797
		AW612968 AA630644 AJ751211 N26980 AJ394506 AA747849 BF154926 BF477185 AA649647 R39135 AJ75021
		AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG76490
		AV703420 H65047 AA485582 R56186 H90385 R55913 B1261497 B1018403 BF376945 T75578 BF933325 BF93
		B1018121 N41953 BF933343 BF932871 H08334 R14012 BF897622 T50816 BG698803 BF340083 Z20199

TABLE 60D:

Pkey:	Unique number corresponding to an Eos probeset
Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to th
Strand:	sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.
NL_position:	Indicates DNA strand from which exons were predicted.
	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
405451	7622517	Minus	145949-146227
402525	9800048	Minus	19748-20583
401780	7249190	Minus	28397-28617,28920-29045,29135-29296,2941
401781	7249190	Minus	83215-83435,83531-83656,83740-83901,8423
402880	9926561	Minus	41555-41865
401963	3126783	Plus	51382-51521

TABLE 61A: ABOUT 72 GENES UPREGULATED IN BENIGN NEVI RELATIVE TO PRIMARY MELANOMAS

Table 61A lists about 72 genes upregulated in benign nevi relative to primary melanomas. Genes were selected from 59680 probesets on the

Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the

Pkey:	Unique Eos probeset identifier number
ExAccn:	Exemplar Accession number, Genbank accession number
UnigeneID:	Unigene number
Unigene Title:	Unigene gene title
R1	average of benign nevi AIs divided by the 90th percentile of primary melanoma AIs
R2	average of benign nevi AIs divided by the 90th percentile of primary melanoma AIs, where the 15th percentile of normal I
	numerator and denominator

Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
431103	M57399	Hs.44	pleiotrophin (heparin binding growth fac	3.80	2.50
424897	D63216	Hs.153684	frizzled-related protein	3.40	2.69
429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	2.90	3.25
431089	BE041395		ESTs, Weakly similar to unknown protein	2.82	1.56

459702	539529_1	BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354
414221	685585_1	AA136653 AA136656 AW450979 AA94358 AA809054 AW238038 AA492073 BE168945
455657	1490185_1	BE065209 BE065364 BE065110 BE065111
419200	9531_1	BF036043 AW190446 BG194731 AW662036 AA45021 BE937550 AW818972 AW393132 AA834685 BF112058 AV721682 H16423 AI270167 AI057345
5		AA937302 AW818444 BE929780 BG498678 BF155010 BI598271 BI595811 BE161728 AW578737 AW753711 AW379707 AW381918 BG506608
		AW028637 AW994240 BF887392 BF790073 AW381624 AV727105 BF439618 AA443174 AI018009 N42650 AW573242 AJ417258 AA463483 AI676131
		AI167170 AA836627 AA43828 AW592922 AA235129 AA730278 AW439062 AW474332 B043239 AW474342 BG708553 AW362423 BF090028
		BE827256 R16550 R39478 R39479 R94368 BG540916 BM314745 AA251087 D54231 D55274 BF085805 D31589 AW966405 AW994425 D81879
10		BE093545 AW901107 AA383529 BI021552 R56420 N39976 AAS73281 H82595 AA234955 BE093539 AW367006 BF358697 BF366318 AA663856
		BE702099 BF035969 AI267384 AI267232 BE348320 AA621574 AA851212 BF083343 BF083341 AV745131 D53074 AW954476 AW954472 AA376836
		AV724531 D53063 C14928 AA093287 AA062638 BG483558 BE940050 AA765954 T70171 BE938775 BE940057 D53502 AW373300 AI118798
		BM128728 AA193411 AW444709 AW952455 AI887612 BF431948 BI496876 AI264159 BM128481 AI624657 AI589301 AI869467 AA861685 AA251595
		AA625761 AA872090 AA826790 AA328366 BE827416 R75951 D56918 R68122 BE827384 AI118797 AI184164 AA164411 BI495332 BE858113
		AI863860 HD0660 T69849 AW780389 C14667 BE934995 BI018652 R92801 AA164410 HD0752 AW373305 AW373299 AW373302
15	430540 713_2	BC017171 BC012195 NM_007126 AF100752 AL137377 Z70768 BM474855 BG754806 AU124376 BG757203 BG764420 BG775028 BG824418
		BM045810 AU120387 BG770238 BG686740 BG913323 BI759980 BG395998 BM048875 BE881070 BE313689 BE879144 BM309834 AW245847
		AI770171 BF196861 BE856897 AA463876 AI375927 AA648810 AA948193 AA490916 AA459893 AI458188 AI240408 AI191843 AI131029 AW768399
		AI365196 AW337984 AW026150 BE466591 BE674599 AI818438 AA772197 AI651927 AW151143 BI198825 BG819083 BM458764 BE903567
20		BE732715 BM043200 BE900263 BE900706 BE731097 BE390023 BG875384 BF996406 BF988930 BM475542 AW246215 BE501897 BE903610
		BE561530 BE560537 BE903782 BE732947 BI227204 BG761305 BE252642 BE391848 BE382475 BG008258 BI547991 BM459099 BE391391 BE259420
		BE298109 AW245422 AI423847 AI914618 H80534 BE301004 AL531791 AI435581 BF931112 AL577303 AA373265 BE746965 BF743630 BE879296
		AI359493 BM018598 AI689260 AW072450 F20201 AW151405 AW517572 AA773458 BG259694 BE391163 BG621529 AI241728 BG767231 BM462953
		BG340524 W52648 AA113434 BE785431 BI041981 BG832385 BG253168 BG759470 BF369329 BF981332 BE259418 BE785738 BI091658 N72512
25		W58732 W85690 BG958989 AI205206 H19721 W17051 W77958 BI262010 AA84319 W74143 W72214 N85194 BE734033 BG164099 AA931069
		F13645 R41394 AK025758 BG180977 BE349455 AA812018 AA740241 AI027722 AI150356 AA886395 AW977627 BE220225 AA884082 AW518114
		AI243844 AA809493 AA481029 AA825718 AI347866 AI431670 AA814435 AI251109 R07704 AA765606 AA724593 AI918399 AI537550 AA491103
		AW008188 R07703 AA989120 AA746235 AW026983 AA789102 AU185751 AW971465 AA489681 AW971893 AW612086 BE077936 BI860809
		BE002760 BG746251 BE962912 BM454584 AL134894 BF104082 H80591
30	434596 14701_1 427289 1820_2	AF147374 T59538 T59589 T59598 T59542
		BC007350 BG766159 BG769338 BG761999 BG744385 BG770572 AW370610 AW370581 AA978353 AW327973 AW402425 AI889380 AA868504
		AW612968 AA630644 AJ751211 N26980 AI394506 AA747849 BF154926 BF477185 AA649647 R39135 AI750216 T35363 W36278 AW079375
		AW612240 AA505495 AA515380 BG760793 AW370651 BG766029 AW370595 BF229885 BG762422 BG764907 T50662 AA025671 AW815715
		AV703420 H65047 AA455582 R56186 H90385 R55913 BI261497 BI018403 BF376945 T75578 BF933325 BF932853 BG502266 AW868934 AV683504
35	400263 18977_1	BI018121 NA1953 BF933343 BF932871 H08334 R14012 BF897622 T50816 BG698803 BF340083 Z20199
		Z11692 X51456 NM_001961 M19997 BI224253 BG830478 AU122147 AU123437 BG113591 BG752624 BE886804 BI868669 BG337216 AW629935
		BM016525 AI560409 AL562866 AI909178 BF849556 AA371735 BF038841 BF727115 BC006547 BG757526 AL555664 BI261304 BG770095 BI033486
		BI517580 BG876486 BI011828 AI313235 BG831724 BF869862 BG998348 BI011834 BF888337 BF898627 BF092380 AW803215 F01241 BF805719
		BG876487 AW498536 BF988866 BG998849 AA248724 BG829202 BG756456 BG032392 BI859287 BM016990 BG332369 BE933685 BE166758
40		BM452445 AI937808 AW026128 N23684 AW06041 AI337621 F33111 BF344301 BG105450 BG387343 BF569547 BF154671 BM007358 BF569385
		BE772007 BI199487 BF761700 BI251519 BF944452 BF898506 AI038390 BM044934 AW381142 BG743618 BE769206 BE893973 BI015047 BF886479
		BF761350 BE769769 BG766117 BF847365 BE397834 AW371121 BF089125 BE082996 BF183193 BG180964 BF089940 BI000274 BG255503
		BG744499 BG774174 BI015084
		BG333973 BE385437 BE408833 BE387650
45	414580 623093_1 437026 1240260_1 419045 348516_2	AW976573 AA742335 AA830000
		BF981324 BG723297 T85693 T81681 T81909
50		TABLE 62C: Pkey: Unique number corresponding to an Eos probeset Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495. Strand: Indicates DNA strand from which exons were predicted. NL_position: Indicates nucleotide positions of predicted exons.
55	Pkey Ref Strand NL_position	
	404356 7630858 Minus 126433-126623	
	401116 9966559 Plus 123579-124447	
	404977 3738341 Minus 43081-43229	
	402181 8575912 Plus 449746-450040	
60	405451 7622517 Minus 145949-146227	
	402217 9795981 Minus 21521-21757	
	406040 6758938 Minus 23063-23599	
	403532 8076842 Minus 81750-81901	
	402829 8918414 Plus 101532-101852,102006-102263	
	403828 9838214 Plus 31755-32148	
65	405776 7159748 Minus 105911-107251	
	401963 3126783 Plus 51382-51521	
	402994 2996643 Minus 4727-4969	
	405016 8272661 Plus 41341-41940	
	402911 7263904 Plus 142689-142979	
70	403960 8224403 Minus 90999-94843	
	406266 7528342 Minus 2365-2518	
	403803 8112965 Plus 55513-55778	
	404790 7230958 Plus 38611-38761	
	405318 3638954 Plus 79689-79967	
75	402343 8099256 Plus 4677-6084	
	403986 8576059 Plus 90692-91238	
	401914 9369520 Plus 62537-62945,63155-63308	
	402450 9796674 Plus 137536-137682,137920-138045	
	404067 3282162 Plus 1415-2071	
80	406368 9256126 Minus 72447-72588,72673-72802,73119-73245	
	400867 9838275 Plus 34136-34846	
	402605 9909420 Minus 47680-47973	
	403969 8569909 Plus 31237-31375,32405-32506	

404632 9796668 Plus 45096-45229

5 TABLE 63A: ABOUT 181 GENES UPREGULATED IN BENIGN NEVI RELATIVE TO MELANOMA METASTASES

Table 63A lists about 181 genes upregulated in benign nevi relative to melanoma metastases. Genes were selected from 59680 probesets on the Eos/Affymetrix Mu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

10 Pkey: Unique Eos probeset identifier number  
 ExAcct: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 R1: average of benign nevi AIs divided by the 90th percentile of melanoma metastasis AIs  
 R2: average of benign nevi AIs divided by the 90th percentile of melanoma metastasis AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

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Pkey	ExAcct	UnigeneID	Unigene Title	R1	R2
401781			Target Exon	19.33	19.21
422511	AU076442	Hs.117938	collagen, type XVII, alpha 1	13.54	14.18
401780			NM_005557:Homo sapiens keratin 16 (foca	12.97	13.63
20 409601	AF237621	Hs.80828	keratin 1 (epidermolytic hyperkeratosis)	12.61	31.19
412636	NM_004415		desmoplakin (DPL, DPT)	11.73	6.91
420783	AI659838	Hs.99923	lectin, galactoside-binding, soluble, 7	10.18	14.08
409632	W74001	Hs.55279	serine (or cysteine) proteinase inhibitor	8.48	6.79
421733	AL119671	Hs.1420	fibroblast growth factor receptor 3 (ach	8.28	9.62
25 430686	NM_001942	Hs.2633	desmoglein 1	7.26	5.64
429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	7.12	10.88
442577	AA292998	Hs.163900	ESTs	7.01	6.59
406964	M21305		FGENES predicted novel secreted protein	6.50	8.82
401785			NM_002275:Homo sapiens keratin 15 (KRT1	6.40	9.77
30 410001	AB041036	Hs.57771	kalikrein 11	6.18	6.16
417515	L24203	Hs.82237	ataxia-telangiectasia group D-associated	5.73	16.57
418686	Z36830	Hs.87268	annexin A8	5.32	5.27
439496	BE616501	Hs.32343	Homo sapiens, Similar to RIKEN cDNA 1110	4.89	9.81
35 452240	AI591147	Hs.61232	ESTs	4.89	6.67
402525			NM_002699:Homo sapiens POU domain, clas	4.74	4.80
431360	NM_000427	Hs.251680	loricin	4.66	3.98
431103	M57399	Hs.44	pleiotrophin (heparin binding growth fac	4.63	5.69
418067	AI127958	Hs.83393	cystatin E/M	4.56	6.78
424012	AW368377	Hs.137569	tumor protein 63 kDa with strong homolog	4.56	5.73
40 418663	AK001100	Hs.41690	desmocollin 3	4.44	5.23
419329	AY007220	Hs.288998	S100-type calcium binding protein A14	4.24	6.49
439706	AW872527	Hs.59761	ESTs, Weakly similar to DAPI_HUMAN DEATH	3.95	3.37
421773	W69233	Hs.112457	ESTs	3.88	9.60
408536	AW381532	Hs.135188	ESTs	3.82	10.18
45 418394	AF132818	Hs.84728	Kruppel-like factor 5 (intestinal)	3.78	6.33
408000	L11690	Hs.198689	bullous pemphigoid antigen 1 (230/240kD)	3.77	4.92
432374	W68815	Hs.301885	Homo sapiens cDNA FLJ11346 fs, clone PL	3.70	5.30
424049	AB014524	Hs.138380	KIAA0624 protein	3.68	4.41
421948	L42583	Hs.334309	keratin 6A	3.62	3.13
50 427666	AI791495	Hs.180142	calmodulin-like skin protein (CLSP)	3.59	4.40
422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	3.48	6.09
436895	AF037335	Hs.5338	carbonic anhydrase XII	3.42	3.28
437191	NM_006846	Hs.331555	serine protease inhibitor, Kazal type, 5	3.28	3.89
401760			Target Exon	3.21	7.11
55 431089	BE041395		ESTs, Weakly similar to unknown protein	3.21	5.78
434293	NM_004445	Hs.3796	EphB6	3.14	3.11
412432	AA126311	Hs.9879	ESTs	3.14	4.85
442503	AF147078	Hs.150853	p53-responsive gene 5	3.11	5.92
414987	AA524394	Hs.294022	hypothetical protein FLJ14950	3.07	4.89
60 420798	W93774	Hs.99936	keratin 10 (epidermolytic hyperkeratosis	2.99	3.09
433339	AF019226	Hs.8036	glioblastoma overexpressed	2.96	2.75
414876	AW950925	Hs.924	crystallin, mu	2.94	3.82
437233	D81448	Hs.339352	Homo sapiens brother of CDO (BOC) mRNA,	2.87	3.42
424897	D63216	Hs.153684	frizzled-related protein	2.87	1.96
65 456034	AW450979		gb:U1-H-B13-aka-a-12-0-U1.s1 NCI_CGAP_Su	2.73	2.54
424364	AW383226	Hs.163834	ESTs, Weakly similar to G01763 atrophin-	2.72	2.92
427318	AF186081	Hs.175783	zinc transporter	2.71	2.21
452887	AI702223	Hs.107253	hypothetical protein DKFZp761F241	2.67	6.47
452308	AI167560	Hs.61297	ESTs	2.67	4.61
70 407788	BE514982	Hs.38991	S100 calcium-binding protein A2	2.64	2.68
431369	BE184455	Hs.251754	secretory leukocyte protease inhibitor (	2.57	3.91
451541	BE279383	Hs.26557	plakophilin 3	2.49	5.47
453317	NM_002277	Hs.41696	keratin, hair, acidic, 1	2.45	4.17
412633	AF001691	Hs.74304	periplakin	2.42	4.90
75 417233	W25005	Hs.24395	small inducible cytokine subfamily B (Cy	2.41	2.68
424797	AA622394	Hs.153177	ribosomal protein S28	2.39	2.67
424010	AL080188	Hs.137556	Homo sapiens mRNA; cDNA DKFZp434A132 (fr	2.39	4.07
453241	H58995	Hs.37648	ESTs	2.39	2.34
426451	AI908165	Hs.169946	GATA-binding protein 3 (T-cell receptor	2.36	1.88
80 423467	AK000214	Hs.129014	hypothetical protein FLJ20207	2.32	2.24
432222	AI204995		gb:an03c03.x1 Stratagene schizo brain S1	2.31	1.99
430168	AW968343	Hs.145582	DKFZP434I1735 protein	2.30	2.60
457121	AI743770	Hs.180513	ESTs, Weakly similar to KIAA0822 protein	2.28	1.91

	433091	Y12642	Hs.3185	lymphocyte antigen 6 complex, locus D	2.27	8.50
	446989	AK001898	Hs.16740	hypothetical protein FLJ11036	2.27	2.21
	429365	AA451798	Hs.99249	ESTs	2.25	2.54
5	459702	AJ204995		gb:an03c03.x1 Stratagene schizo brain S1	2.25	2.35
	420511	AF052692	Hs.98485	gap junction protein, beta 3, 31KD (conn	2.23	2.17
	444946	AW139205	Hs.156457	hypothetical protein FLJ22408	2.23	3.23
	417017	AA976064	Hs.180842	ribosomal protein L13	2.21	2.74
	433124	U51712	Hs.13775	hypothetical protein SMAP31	2.21	1.68
10	430152	AB001325	Hs.234642	aquaporin 3	2.20	3.32
	444726	NM_006147		interferon regulatory factor 6	2.15	5.20
	454034	NM_000691	Hs.575	aldehyde dehydrogenase 3 family, member	2.15	2.82
	425483	AF231022	Hs.158159	FAT tumor suppressor (Drosophila) homolo	2.14	2.96
	419912	AF249745	Hs.6066	Rho guanine nucleotide exchange factor (	2.14	2.25
	431441	U81961	Hs.2794	sodium channel, nonvoltage-gated 1 alpha	2.12	2.99
15	444105	AW189097		ESTs	2.11	2.98
	428748	AW593206	Hs.98785	Ksp37 protein	2.09	1.51
	456826	AI871742	Hs.302428	wingless-type MMTV integration site fami	2.09	3.25
	413163	Y00815	Hs.75216	protein tyrosine phosphatase, receptor t	2.09	4.97
20	410677	NM_003278	Hs.65424	tetranectin (plasminogen-binding protein	2.06	5.68
	430285	AJ917602	Hs.106440	ESTs	2.06	2.04
	444781	NM_014400	Hs.11950	GPI-anchored metastasis-associated prote	2.05	5.92
	451668	Z43948	Hs.326444	cartilage acidic protein 1	2.04	2.19
	441134	W29092	Hs.346950	cellular retinoic acid-binding protein 1	2.04	3.08
25	433428	T29975	Hs.33104	Huntingtin interacting protein C	2.04	1.63
	425831	U46689	Hs.159608	aldehyde dehydrogenase 3 family, member	2.03	3.92
	446727	AB011095	Hs.16032	KIAA0523 protein	2.01	2.60
	431703	AA514264	Hs.4437	triosephosphate isomerase 1	2.01	2.05
	452554	AW452434	Hs.58006	ESTs, Weakly similar to ALU5_HUMAN ALU S	1.99	4.04
30	439625	AF086453	Hs.58611	ESTs	1.99	2.31
	402880			Target Exon	1.99	2.75
	428471	X57348	Hs.184510	stratfin	1.98	2.10
	413859	AW992356	Hs.8364	Homo sapiens pyruvate dehydrogenase kina	1.97	3.16
	452547	AA335295	Hs.74120	adipose specific 2	1.95	3.89
35	437679	NM_014214	Hs.5753	inositol(myo)-1(or 4)-monophosphate 2	1.94	2.06
	429259	AA420450	Hs.292911	Plakophilin	1.93	2.96
	406387			Target Exon	1.92	2.97
	455797	BE091833		gb:IL2-BT0731-260400-076-F04 BT0731 Homo	1.91	3.46
	437202	AA326110		nuclear transcription factor Y, gamma	1.89	2.00
40	426150	NM_003658	Hs.167218	BarH-like homeobox 2	1.88	2.60
	434574	AI424458	Hs.33470	ESTs	1.85	4.61
	446051	BE048061	Hs.37054	ephrin-A3	1.85	3.48
	424471	AA341329	Hs.311524	ESTs	1.84	2.62
	422106	D84239	Hs.111732	Fc fragment of IgG binding protein	1.83	4.69
45	451721	NM_006946	Hs.25915	spectrin, beta, non-erythrocytic 2	1.82	2.00
	451849	AI199261	Hs.27191	hypothetical protein from clone 24796	1.81	2.31
	429348	AJ242859	Hs.199731	Langerhans cell specific c-type lectin	1.79	3.07
	423523	AW299828	Hs.193580	ESTs	1.77	3.37
	432543	AA552690	Hs.152423	Homo sapiens cDNA: FLJ21274 fis, clone C	1.76	2.46
50	403828			C4000447" gij7705570pe NP_038851.1  KI	1.73	2.06
	412446	AI768015		ESTs	1.68	3.16
	420039	NM_004605	Hs.94581	sulfotransferase family, cytosolic, 2B,	1.67	2.22
	411274	NM_002776	Hs.69423	kallikrein 10	1.66	2.26
55	401963			NM_006311:Homo sapiens nuclear receptor	1.66	2.52
	435016	AI284219	Hs.130749	ESTs, Weakly similar to I38022 hypotheti	1.65	2.20
	437897	AA770561	Hs.146170	hypothetical protein FLJ22969	1.64	3.21
	419648	T73661	Hs.91877	thyroid hormone responsive SPOT14 (rat)	1.63	2.94
	410545	U32324	Hs.64310	interleukin 11 receptor, alpha	1.62	2.58
	429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	1.62	3.92
60	456898	NM_001928	Hs.155597	D component of complement (adipsin)	1.60	3.43
	423526	AB011086	Hs.129739	KIAA0514 gene product	1.60	2.18
	416305	AU076628	Hs.79187	coxsackie virus and adenovirus receptor	1.60	2.47
	413966	AA133935	Hs.173704	ESTs, Moderately similar to A53959 throm	1.59	2.99
	414217	AI309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fis, clone L	1.59	2.82
65	429299	AI620463	Hs.347408	hypothetical protein MGC13102	1.57	2.64
	432647	AI807481	Hs.278581	fibroblast growth factor receptor 2 (bac	1.56	2.74
	429002	AW248439	Hs.2340	junction plakoglobin	1.56	2.97
	430171	AF086289	Hs.234766	skin-specific protein	1.54	2.18
	422717	AI557623	Hs.119475	cold inducible RNA-binding protein	1.51	2.19
70	414323	NM_014759	Hs.334688	KIAA0273 gene product	1.51	3.73
	423184	NM_004428	Hs.1624	ephrin-A1	1.50	2.18
	423101	AW572317	Hs.12082	Homo sapiens mRNA: cDNA DKFZp566L203 (fr	1.50	2.00
	424362	AL137646		Homo sapiens mRNA: cDNA DKFZp586F0824 (f	1.48	2.04
	433662	W07162	Hs.150826	RAB25 RAB25, member RAS oncogene family	1.46	2.83
75	445431	AF137386	Hs.12701	plasmotipin	1.46	2.00
	456906	AF117646	Hs.156637	Cas-Br-M (murine) ectropic retroviral tr	1.44	2.04
	442599	AF078037	Hs.324051	RelA-associated inhibitor	1.42	3.50
	445656	W22050	Hs.21299	ESTs, Weakly similar to AF151840 1 CGI-8	1.42	2.53
	444672	Z95636	Hs.11669	laminin, alpha 5	1.40	2.36
80	447990	BE048821	Hs.20144	small inducible cytokine subfamily A (Cy	1.40	2.29
	418462	BE001596	Hs.85266	Integrin, beta 4	1.39	2.86
	453023	AW028733	Hs.31439	serine protease inhibitor, Kunitz type,	1.38	2.28
	416340	N31772	Hs.79226	fasciculation and elongation protein zet	1.38	2.24
	433417	AA587773	Hs.8859	Homo sapiens, Similar to RIKEN cDNA 5830	1.38	2.14

5	407815	AW373860	Hs.183860	hypothetical protein FLJ20277	1.36	2.34
	432894	AW167668	Hs.279772	brain specific protein	1.36	5.09
	439733	AL365412	Hs.107203	hypothetical protein from EUROIMAGE 1759	1.36	2.00
	454478	AW805749		superoxide dismutase 2, mitochondrial	1.35	2.85
	423515	AA327017	Hs.176594	ESTs	1.35	2.45
	436663	AW410458	Hs.5258	chromosome 11 open reading frame2	1.35	2.07
	404246			Target Exon	1.34	2.96
	411939	AI365585	Hs.146246	ESTs	1.33	2.31
	409178	BE393948	Hs.50915	kallikrein 5	1.33	2.03
10	427795	BE268268	Hs.180842	ribosomal protein L13	1.33	2.29
	447299	AF043897	Hs.18075	chromosome 9 open reading frame 3	1.32	2.78
	447330	BE279949	Hs.18141	laminin 1	1.32	3.37
	433399	N46406	Hs.84700	similar to phosphatidylcholine transfer	1.31	2.71
	403986			Target Exon	1.31	2.09
15	407597	AA043925	Hs.339352	Homo sapiens brother of CDO (BOC) mRNA,	1.30	2.28
	450796	NM_001988	Hs.25482	envoplakin	1.30	3.45
	415550	L13720	Hs.78501	growth arrest-specific 6	1.29	2.76
	415512	Y16270	Hs.78482	paralemin	1.26	2.49
	430513	AJ012008	Hs.241586	G6C protein	1.26	3.07
20	422581	NM_016339	Hs.118562	Link guanine nucleotide exchange factor	1.23	2.04
	420048	AW206824	Hs.25766	ESTs	1.23	2.01
	425883	AL137708	Hs.161031	Homo sapiens mRNA; cDNA DKFZp434K0322 (f	1.23	2.22
	430560	Z28942	Hs.243960	N-myc downstream-regulated gene 2	1.23	2.42
25	426377	AK001921	Hs.169575	hypothetical protein MGC2550	1.23	2.20
	402218			NM_022165*:Homo sapiens Lin-7b protein (	1.23	2.01
	413944	AW001579	Hs.9645	Homo sapiens mRNA for KIAA1741 protein,	1.18	2.24
	414186	U33446	Hs.75799	protease, serine, 8 (protsasin)	1.16	2.16
	426068	AF029778	Hs.166154	jagged 2	1.15	2.07
30	431243	U46455	Hs.252189	syndecan 4 (amphiglycan, ryudocan)	1.14	2.33
	411388	X72925	Hs.69752	desmocollin 1	1.00	2.61
	443672	AA323362	Hs.9667	butyrobetaine (gamma), 2-oxoglutarate di	1.00	2.63

TABLE 63B:

Pkey:	Unique Eos probeset identifier number
CAT number:	Gene cluster number
Accession:	Genbank accession numbers

	Pkey	CAT Number	Accession
40	412636	1438_1	M77830 NM_004415 AF139065 BG681115 BG740377 B1712964 BG000656 AA128470 BI438324 H27408 BE931630 BE167165 AW370827 AW370813 JO5211 BG698865 BG740734 BG680618 BG739778 B1765807 BM353403 BM353248 AW177784 AW205789 AW951576 AW848592 BE182164 BF149266 BE940187 BI060445 BI060444 BF350983 BE720095 BE720069 BE715154 BE082584 BE082576 BE004047 AA857316 BI039774 BE713818 BE713548 AW170253 BE160433 BI039775 AW886475 BM462504 BE931734 BF149264 AA340777 BF381183 BG621737 AU127260 AW364859 BF993352 BG223489 BE819009 BF381184 BE715956 RS8704 AA852212 AW366566 BI090358 BF087707 BE819046 BE819005 AA371727 BE073467 BE819069 BE819048 BI036306 BG990973 BI040954 BF919911 AU140155 AI951766 AI434518 AW804674 BF752969 BE837009 BE925826 BF149265 AW995615 BE814264 BI039782 AU140407 BE709863 BF985642 BE001923 BF933510 AW265328 BG436319 BE182168 AW365175 AW847688 BE818280 AW177933 BF873679 AW178000 BE082526 BF476866 BF086994 BF952276 BE082507 BE082514 BE082505 BF873693 AW068840 AW847678 BF804153 AW365157 BE813930 BE002030 AW365153 BE184941 BF749421 BE184920 BF839562 BE184933 BF842254 BE698470 BE931048 BF999889 BF368816 BE184924 BE159646 BE714632 BE184948 BG986845 AA131128 AA099891 W39488 CO4715 BF096124 BE865341 AW799304 AL603116 BE149760 BE705967 BE705966 BE705968 AW848723 AW376699 AW376817 AW376697 BG005097 BF751115 BE696084 AW848371 AW376782 AW848789 AW849074 AW361413 BF927725 BF094211 AW997139 BE865474 BE185187 BE156621 BE715089 BE713297 BE713298 BE179915 AW799309 BF872345 BF088676 BE705939 AW752599 BG005197 BF350086 BE715196 BE715155 BF752396 BF093817 BF831190 BF752409 BE006561 BG959922 BF094833 BF094748 BF094583 AW377699 AW507238 BE082519 AW377700 BF349467 AI190590 AI554403 AI392926 AU158477 BI467252 AU159919 AI760816 BF082516 BF082516 AI439101 AA451923 AI340326 AI590975 BI791553 AI700963 AI142882 AD039975 AA946936 AA644381 BM314884 AA702424 AI417612 AW190555 AI220573 AI304772 AI270345 AI627383 AA552300 AI911702 AW166807 AI346078 W95070 AA149191 AA026864 AI830049 AW780435 AI078449 AI819984 AI858282 BI468588 AI860584 AI025932 AA026047 AA703232 AA658154 AA515500 AW192085 AA918281 T77861 AI927207 AI205263 BF082491 AW021347 AI568096 BE939862 AA088866 D12062 AA056527 AA782109 W19287 W02156 AW150038 AA022701 T87181 H44405 AI910434 BF082513 AI494069 AI270027 BI453878 AA128330 BG681425 BE706078 R20904 BG680059 BG676647 BF764409 AA026654 AV745530 BI762796 BG287391 AW798780 BE706045 BE926470 AW799118 BF087996 BE002273 AW879451 AI571075 BE067786 AV721320 AI022862 N29754 CO3378 N84767 AI131077 H03146 BE714290 AI586869 AI568892 AI915596 AW105614 AI887258 AI538577 BE926474 BE067737 BG319486 AA247685 AW798883 AW103521 BF999173 AW860878 BE939707 BE185750 BE714064 BE713903 BE713868 BE713763 BG950164 BE713810 AW365151 BG955489 BE005272 BF915937 AW365148 AI905927 BF992780 AW853812 BG954443 BI770853 BG679406 BG740832 BG681087 BG698430 AA455100 T87267 BE696209 BE696210 BI089483 BE006273 BE872225 AW391912 BE925515 BG677012 BG741970 AA026480 BE705999 BG677157 BE009090 BG681378 BE712291 BG961498 BG678984 BI040941 AA337270 AW384371 AW847442 BI058659 BE813665 W95048 W25458 AW177786 AA025851 BE937133 BF154837 BG949393 BE714441 AW996245 BE711801 AI284090 BE064323 BE719390 BE940148 BG991212 BF375714 BF349522 BG996267 T48793 BI013292 BE001925 AW365156 AW365154 AW606653 BF763109 BE931637 BE167181 BE713879 BF354008 BF678726 H90899 AW365145 W38382 AI498487 BG940189 AW063489 AA715980 BF001091 BF880066 AA666102 AA621946 AA491826 AA136653 AA136656 AW450979 AA984358 AA809054 AW238038 AA492073 BE168945 BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354 BG207209 BE166299 AI204995 BG199355 AW969908 AA528756 AW440776 BI044354 BG285809 BE940673 BG432524 BE157554 BG676980 AU144284 AI745383 AU159045 AI693500 AW293668 AW371408 BE856107 AI338042 AW188320 AI698246 BE673290 AW297653 AA156532 AI017342 AI916754 AI190644 AI184302 AA857671 BE857018 AI307420 AI318157 AW204327 AW664668 AW274339 AA582788 AI345741 AW301433 AI873468 AW137388 BF718731 BF718413 AA877495 BF001575 AI824693 AW849604 AW849405 AW849396 AW849173 BE673179 AI611327 AA705753 BE715478 AW849414 AW849399 AI085759 AI140849 T67412 AI889865 AW104647 AI912495 AW889874 AI744241 BE717113 BE717108 BE715564 AI872527 AA029457 CO0338 AI469558 BE715577 AA045413 BF843813
	431089	125941_2	AW189097 AI123917 AI123926
	456034	685586_1	BE091833 BE091874 BE091871
	432222	139529_5	AL110199 AI598719 AA152097 W84430 AI304351 BE670780 BF003019 AI271659 AW338914 AI127763 AI191873 AI922951 AI568416 AI077680
	459702	139529_2	AA358674 AI138802 AI599070 AI068745 AW418696 BF475830 AI144150 AA724257 AA622339 AI375884 AI880453 AW874251 BF941345 AI619746
	440326	3503_2	AJ225114 AI801268 AI554474 BM023333 AI093946 AI699306 AI803839 AA436797 AI361531 AI123010 AW169313 BM023082 AI081626 AA513457
			AA278720 AW518810 AA361091 AI499891 AI686346 BF436872 AI681496 AL572961 AI334148 AW138291 AI149063 AA278226 AA370719 AI152023
			AI401749 AA127464 AL573761 BG913208 T07824 AI346417 H44939 AV721378 N48299 W72005 AA302424 AI611143 AW514684 BE041749
75	444105	649788_1	
	455797	1511159_1	
	437620	27670_1	
80			

5	412446	63467_1	AW370992 R42918 H10757 R10703 C01061 R27637 A827230 AW151953 AA651675 AA228006 AA233950 BE858910 R30801 W32704 H39784 BE090279 BG697660 AW877265 B1818938 BF528291 AW953624 R57451 BF969694 BC021735 AI669212 AL120184 AJ769949 BE701002 BE184363 BE819031 BG702238 BF090049 BF963318 BF961912 BF943013 AA934514 AA151245 BF960659 AA987907 Z41449 BF908059 BF908053 BF908049 BE699424 BF908060 BF962832 BF952020 BF963134 B1035538 BF908052 BF908057 BF090026 BF943158 AI632924 BF512340 BF952021 BF960776 BF943437 BF942847 A1768015 F09778 F04816 F02721 AA102645 AI633838 AA617929 BF947001 B1035448 BE935876 AW890837 AW898604 BF967405 BF963433 BG704815 AF284421 AL137646 BG542551 A1278088 AJ423919 A1274095 BE838965 BE839174 BE839102 BF924520 B1913343 AW238809 AL134380 AW793289 AL534638 T97116 AW855182 C02210 A1783480 AW024874 454478 4273_16 AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538	

TABLE 63C:

15	Pkey:	Unique number corresponding to an Eos probeset
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.
15	Strand:	Indicates DNA strand from which exons were predicted.
	NL_position:	Indicates nucleotide positions of predicted exons.

Pkey	Ref	Strand	NL_position
401781	7249190	Minus	83215-83435,83531-83656,83740-83901,8423
401780	7249190	Minus	28397-28617,28920-29045,29135-29296,2941
401785	7249190	Minus	165776-165996,166189-166314,166408-16656
402525	9800048	Minus	19748-20683
401760	9929699	Plus	83126-83250,85320-85540,94719-95287
402680	9926561	Minus	41555-41865
406387	9256180	Plus	116229-116371,117512-117651
403828	9838214	Plus	31755-32148
401963	3126783	Plus	51382-51521
404246	7406725	Plus	82477-82628,82721-82817,82910-83071,8314
403986	8576059	Plus	90692-91238
402218	7689783	Plus	127677-127886

TABLE 64A: ABOUT 929 GENES DOWNREGULATED IN PRIMARY MELANOMAS AND/OR MELANOMA METASTASES RELATIVE TO NORMAL SKIN

Table 64A lists about 929 genes downregulated in primary melanomas and/or melanoma metastases relative to normal skin. Genes were selected from 59680 probesets on the Eos/Allymetrix Hu30 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

35	Pkey:	Unique Eos probeset identifier number
	ExAccn:	Exemplar Accession number, Genbank accession number
40	UnigeneID:	Unigene number
	Unigene Title:	Unigene gene title
40	R1	90th percentile of normal skin AIs divided by the 90th percentile of primary melanoma and melanoma metastasis AIs
	R2	90th percentile of normal skin AIs divided by the 90th percentile of primary melanoma and melanoma metastasis AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
420813	X51501	Hs.99949	prolactin-induced protein	27.72	20.12
408591	AF015224	Hs.45452	mammaglobin 1	26.40	24.26
431360	NM_000427	Hs.251680	loricrin	26.16	20.45
401781			Target Exon	19.68	19.56
412636	NM_004415		desmoplakin (DPI, DPII)	18.12	10.36
429441	AJ224172	Hs.204096	Epophän B (uteroglobin family member)	16.61	18.05
418067	A1127958	Hs.83393	cystatin EM	16.00	25.32
409632	W74001	Hs.55279	serine (or cysteine) proteinase inhibitor	15.64	11.81
409601	AF237621	Hs.80828	keratin 1 (epidermolytic hyperkeratosis)	15.03	37.51
401780			NM_005557: Homo sapiens keratin 16 (foca	14.20	14.86
422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	13.95	28.08
420783	AI659838	Hs.99923	lectin, galactoside-binding, soluble, 7	13.52	18.85
422511	AU076442	Hs.117938	collagen, type XVII, alpha 1	13.14	13.81
428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	12.78	6.35
421733	AL119671	Hs.1420	fibroblast growth factor receptor 3 (ach	12.78	15.22
428824	W23624	Hs.173059	ESTs	12.67	13.24
453309	A1791809	Hs.32949	defensin, beta 1	12.02	12.42
446227	A1281459	Hs.270114	ESTs	11.79	12.32
421948	L42583	Hs.334309	keratin 6A	11.58	9.02
432877	AW974111	Hs.292477	ESTs	11.18	11.30
412047	AA934589	Hs.49696	ESTs	11.04	11.07
407230	AA157857	Hs.182265	keratin 19	10.79	11.40
421296	NM_002666	Hs.103253	perlipin	10.73	7.94
410001	AB041036	Hs.57771	kallikrein 11	10.72	10.70
418026	BE379727	Hs.83213	fatty acid binding protein 4, adipocyte	10.33	7.16
447966	AA340605	Hs.105887	ESTs, Weakly similar to Homolog of rat Z	10.09	9.67
401203			Target Exon	9.95	7.37
452308	A1167560	Hs.61297	ESTs	9.71	20.05
425580	L11144	Hs.1907	galanin	9.66	8.41
433124	U51712	Hs.13775	hypothetical protein SMAP31	9.50	4.96
420919	M57892	Hs.100322	carbonic anhydrase VI	9.41	6.34
443162	T49951	Hs.9029	DKFZP434G032 protein	9.36	10.58
427666	A1791495	Hs.180142	calmodulin-like skin protein (CLSP)	9.19	11.73
431369	BE184455	Hs.251754	secretory leukocyte protease inhibitor (	8.85	17.76
408536	AW381532	Hs.135188	ESTs	8.82	26.43
430686	NM_001942	Hs.2633	desmoglein 1	8.73	6.58
436895	AF037335	Hs.5338	carbonic anhydrase XII	8.69	6.81
418663	AK001100	Hs.41690	desmocollin 3	8.61	9.15

	429852	AB010445	Hs.225948	small inducible cytokine subfamily A (Cy	8.51	13.13
	424012	AW368377	Hs.137569	tumor protein 63 kDa with strong homolog	8.44	9.61
	430130	AL137311	Hs.234074	Homo sapiens mRNA; cDNA DKFZp761G02121 (	8.39	5.13
	442577	AA292998	Hs.163900	ESTs	8.34	7.92
5	437191	NM_006846	Hs.331555	serine protease inhibitor, Kazal type, 5	8.16	10.08
	420859	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	8.04	7.55
	413859	AW992356	Hs.8364	Homo sapiens pyruvate dehydrogenase kina	7.68	7.81
	452240	AI591147	Hs.61232	ESTs	7.63	9.39
	442757	AI739528	Hs.28345	ESTs	7.62	7.31
10	450680	AF131784	Hs.25318	Homo sapiens clone 25194 mRNA sequence	7.51	6.17
	456525	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	7.49	7.12
	407328	AA508857		ESTs, Weakly similar to ALU1_HUMAN ALU S	7.35	7.20
	414217	AI309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fis, clone L	7.16	8.39
	417240	N57568	Hs.48028	EST	7.13	15.05
15	410052	AA525225	Hs.334630	Homo sapiens cDNA FLJ14462 fis, clone MA	7.13	7.28
	431842	NM_005764	Hs.271473	epithelial protein up-regulated in cardi	7.06	6.93
	426488	X03350	Hs.4	alcohol dehydrogenase 1B (class I), beta	7.03	7.85
	439394	AA149250	Hs.56105	ESTs	7.00	4.53
	422963	M79141	Hs.13234	ESTs	6.99	5.30
20	417515	L24203	Hs.82237	ataxia-telangiectasia group D-associated	6.97	20.68
	410530	M25809	Hs.64173	ATPase, H transporting, lysosomal (vacuo	6.96	7.04
	446989	AK001898	Hs.16740	hypothetical protein FLJ11036	6.96	6.68
	427890	AA435761		ESTs	6.94	6.68
	432374	W68815	Hs.301885	Homo sapiens cDNA FLJ11346 fis, clone PL	6.84	8.44
25	429624	AA458648	Hs.99476	ESTs, Weakly similar to 1313184B alpha1	6.83	6.37
	451029	AA852097	Hs.25829	ras-related protein	6.81	8.96
	408000	L11690	Hs.198689	bullous pemphigoid antigen 1 (230/240kD)	6.80	7.68
	439496	BE616501	Hs.32343	Homo sapiens, Similar to RIKEN cDNA 1110	6.77	14.06
	431713	AK000388	Hs.267997	EHM2 gene	6.72	7.11
30	451253	H48299	Hs.26126	claudin 10	6.71	7.17
	414987	AA524394	Hs.294022	hypothetical protein FLJ14950	6.67	11.68
	400304	AF005082	Hs.113261	Homo sapiens skin-specific protein (xp33	6.64	7.90
	408063	BE086548	Hs.42346	calcineurin-binding protein calcarsin-1	6.60	7.29
	424364	AW383226	Hs.163834	ESTs, Weakly similar to G01763 atrophin-	6.58	6.78
35	421773	W69233	Hs.112457	ESTs	6.55	17.59
	425280	U31519	Hs.1872	phosphoenolpyruvate carboxykinase 1 (sol	6.55	6.79
	411388	X72925	Hs.69752	desmocollin 1	6.55	8.97
	401785			NM_002275: Homo sapiens keratin 15 (KRT1	6.51	9.94
40	406867	AA157857	Hs.182265	keratin 19	6.50	6.23
	429504	X99133	Hs.204238	lipocatin 2 (oncogene 24p3) (NGAL)	6.43	6.79
	426106	AI678765	Hs.21812	ESTs	6.41	7.69
	413172	M38180	Hs.38586	hydroxy-delta-5-steroid dehydrogenase, 3	6.39	7.09
	407395	AF005082		gb:Homo sapiens skin-specific protein (x	6.39	7.71
45	422166	W72424	Hs.112405	S100 calcium-binding protein A9 (calgran	6.36	9.23
	437176	AW176809	Hs.42346	calcineurin-binding protein calcarsin-1	6.30	5.45
	400383	AA884208	Hs.30484	ESTs	6.26	6.25
	419329	AY007220	Hs.286998	S100-type calcium binding protein A14	6.22	10.13
	418686	Z36830	Hs.87268	annexin A8	6.19	6.14
50	440116	AI798851		hemoglobin, gamma G	6.18	4.28
	424049	AB014524	Hs.138380	KIAA0624 protein	6.18	6.91
	417366	BE185289	Hs.1076	small proline-rich protein 1B (cornifin)	6.17	7.42
	432543	AA552690	Hs.152423	Homo sapiens cDNA: FLJ21274 fis, clone C	6.16	6.86
	414449	AA557660	Hs.76152	decorin	6.15	3.93
55	441188	AW292830	Hs.255609	ESTs	6.12	6.68
	424008	R02740	Hs.137555	putative chemokine receptor; GTP-binding	6.12	5.33
	431319	AA873350	Hs.302232	ESTs	6.11	6.84
	444105	AW189097		ESTs	5.97	6.20
	428358	AA993222	Hs.101915	Stargardt disease 3 (autosomal dominant)	5.94	5.15
60	407788	BE514982	Hs.38991	S100 calcium-binding protein A2	5.71	5.83
	439706	AW872527	Hs.59761	ESTs, Weakly similar to DAPI_HUMAN DEATH	5.69	4.49
	428666	AL080190	Hs.189242	Homo sapiens mRNA; cDNA DKFZp434A202 (fr	5.65	5.16
	410541	AA065003	Hs.64179	syntenin-2 protein	5.62	5.84
	431926	AW972724		gb:EST384816 MAGE resequences, MAGL Homo	5.61	5.75
65	430332	RS1790	Hs.239483	Human clone Z3933 mRNA sequence	5.60	5.76
	444946	AW139205	Hs.156457	hypothetical protein FLJ22408	5.53	9.25
	430714	AA484757	Hs.287601	Homo sapiens cDNA FLJ13830 fis, clone TH	5.48	5.38
	435538	AB011540	Hs.4930	low density lipoprotein receptor-related	5.46	3.19
	414407	AA147026	Hs.76704	ESTs	5.43	5.29
70	417035	AA192455	Hs.22968	Homo sapiens clone IMAGE:451939, mRNA se	5.40	5.40
	442315	AA173992	Hs.7956	ESTs, Moderately similar to ZN91_HUMAN Z	5.40	3.87
	416931	D45371	Hs.80485	adipose most abundant gene transcript 1	5.39	9.12
	431048	RS0253	Hs.249129	cell death-inducing DFFA-like effector a	5.39	6.06
	436090	AI640635	Hs.332879	EST	5.37	5.33
75	411274	NM_002776	Hs.69423	kalikrein 10	5.37	5.97
	418394	AF132818	Hs.84728	Kruppel-like factor 5 (intestinal)	5.36	9.35
	406706	X03740	Hs.231581	myosin, heavy polypeptide 1, skeletal mu	5.34	4.08
	430171	AF086289	Hs.234766	skin-specific protein	5.32	10.40
	452747	BE153855	Hs.61460	Ig superfamily receptor LNIR	5.31	6.01
80	426451	AI908165	Hs.169946	GATA-binding protein 3 (T-cell receptor	5.31	3.81
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	5.26	5.92
	424399	AI905687		AI905687:IL-BT095-190199-019 BT095 Homo	5.25	16.94
	430071	AA355986	Hs.232068	transcription factor 8 (represses interl	5.20	5.01
	431416	AA532718	Hs.178604	ESTs	5.18	5.38



	420039	NM_004605	Hs.94581	sulfotransferase family, cytosolic, 2B,	5.17	5.72
	446082	AI274139	Hs.156452	ESTs	5.16	5.14
	430699	AW969847	Hs.292718	ESTs, Weakly similar to RET2_HUMAN RETIN	5.14	4.97
	434525	W01370	Hs.46824	ESTs	5.12	6.18
5	426101	AL049987		Homo sapiens mRNA; cDNA DKFZp564F112 (tr	5.11	3.79
	419648	T73661	Hs.91877	thyroid hormone responsive SPOT14 (rat)	5.08	13.64
	438962	BE046594		gb.hn41c11.x1 NCI_CGAP_RDF2 Homo sapiens	5.08	4.09
	419912	AF249745	Hs.6066	Rho guanine nucleotide exchange factor (	5.08	4.77
	420583	H77859	Hs.65450	reticulon 4	5.06	5.56
10	432125	AW972667	Hs.183006	Homo sapiens cDNA FLJ12300 fis, clone MA	5.05	6.32
	445263	H57646	Hs.42586	KIAA1560 protein	5.03	5.22
	407839	AA045144	Hs.161566	ESTs	5.03	5.27
	434293	NM_004445	Hs.3796	EphB6	5.03	4.91
	427850	AA416756	Hs.161051	ESTs, Moderately similar to ALU6_HUMAN A	4.99	16.04
15	414657	AA424074	Hs.76780	protein phosphatase 1, regulatory (inhib	4.94	8.14
	445493	AI915771		metallothionein 1E (functional)	4.93	4.33
	429365	AA451798	Hs.99249	ESTs	4.90	5.19
	412633	AFD01691	Hs.74304	periplakin	4.90	11.71
	448490	AI523897	Hs.271692	ESTs, Weakly similar to I38022 hypotheti	4.85	4.88
20	408491	AI088063	Hs.7882	ESTs	4.80	4.39
	430168	AW968343	Hs.145582	DKFZP434I1735 protein	4.80	6.05
	407102	AA007629		glycerol-3-phosphate dehydrogenase 1 (so	4.78	7.23
	421998	R74441		poly(A)-binding protein, nuclear 1	4.77	4.78
25	422633	X56832	Hs.118804	enolase 3, (beta, muscle)	4.72	6.24
	444930	BE185536	Hs.301183	molecule possessing ankyrin repeats indu	4.71	3.72
	439552	W67826	Hs.55412	ESTs, Weakly similar to K1CJ_HUMAN KERAT	4.70	3.60
	450626	AW190989	Hs.1508	insulin-degrading enzyme	4.68	5.14
	456898	NM_001928	Hs.155597	D component of complement (adipsin)	4.68	15.83
30	408239	AA053401		ESTs, Moderately similar to ALU7_HUMAN A	4.67	6.17
	415192	D17793	Hs.78183	aldo-keto reductase family 1, member C3	4.64	4.48
	443827	AI087867	Hs.134667	ESTs	4.63	5.06
	431441	U81961	Hs.2794	sodium channel, nonvoltage-gated 1 alpha	4.63	8.48
	408741	M73720	Hs.646	carboxypeptidase A3 (mast cell)	4.63	3.19
35	427318	AF186081	Hs.175783	zinc transporter	4.62	3.57
	453767	AB011792	Hs.35094	extracellular matrix protein 2, female o	4.62	5.14
	424046	AF027866	Hs.138202	serine (or cysteine) proteinase inhibito	4.61	6.80
	437233	D81448	Hs.339352	Homo sapiens brother of CDO (BOC) mRNA,	4.60	6.19
	445525	AW967069	Hs.211556	hypothetical protein MGC5487	4.59	2.45
40	402294			Target Exon	4.57	5.47
	424098	AF077374	Hs.139322	small proline-rich protein 3	4.57	5.12
	420798	W93774	Hs.99936	keratin 10 (epidermolytic hyperkeratosis	4.57	4.76
	418021	M15881	Hs.1137	uromodulin (uro-mucoid, Tamm-Horsfall gly	4.54	4.49
	422068	AI807519	Hs.104520	Homo sapiens cDNA FLJ13694 fis, clone PL	4.54	4.32
45	414798	AI286323	Hs.97411	hypothetical protein MGC12335	4.53	3.04
	410132	NM_003480	Hs.300946	Microtubuli-associated glycoprotein-2	4.53	2.91
	400109			Eos Control	4.52	3.94
	407242	M18728		gb:Human nonspecific crossreacting anti	4.51	4.07
	431901	AW295050	Hs.272023	transforming, acidic coiled-coil contain	4.50	4.16
50	435992	AI033259	Hs.118317	Homo sapiens cDNA FLJ12088 fis, clone HE	4.50	4.77
	447365	BE383676	Hs.334	Rho guanine nucleotide exchange factor (	4.50	3.99
	449785	AI225235	Hs.288300	hypothetical protein FLJ23231	4.49	4.02
	424620	AA101043	Hs.151254	kallikrein 7 (chymotryptic, stratum com	4.47	5.43
	432559	AW452948	Hs.257631	ESTs	4.47	3.10
55	459290	NM_001546	Hs.34853	inhibitor of DNA binding 4, dominant neg	4.45	3.17
	422313	AF045941	Hs.115166	scellin	4.45	5.07
	416305	AL076628	Hs.79187	coxsackievirus and adenovirus receptor	4.44	5.25
	432314	AA533447	Hs.312989	ESTs	4.44	3.52
	441633	AW958544	Hs.112242	normal mucosa of esophagus specific 1	4.43	2.64
60	424670	W61215	Hs.116651	epithelial V-Eike antigen 1	4.42	4.27
	414489	AI620677	Hs.73105	ESTs	4.41	3.77
	413040	AA193338	Hs.12321	sodium calcium exchanger	4.36	4.58
	426974	AB002298	Hs.173035	KIAA0300 protein	4.35	4.97
	448249	AW855331	Hs.337124	ESTs	4.35	4.49
65	451743	AW074266	Hs.23071	ESTs	4.34	4.52
	427919	AA173942	Hs.326416	Homo sapiens mRNA; cDNA DKFZp564H1916 (f	4.33	3.94
	422305	AI928242	Hs.293438	ESTs, Highly similar to AF198488 1 trans	4.32	7.20
	408104	AW972927	Hs.293968	ESTs	4.31	3.53
	447945	AI922838	Hs.9670	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.30	3.72
70	439349	AI660898	Hs.6834	ESTs	4.29	4.16
	433339	AF019226	Hs.8036	glioblastoma overexpressed	4.29	3.94
	427074	AA527435	Hs.178589	hepatocellular carcinoma antigen gene 52	4.28	4.97
	453574	AI767947	Hs.50841	ESTs	4.25	3.66
	410677	NM_003278	Hs.65424	tetranectin (plasminogen-binding protein	4.25	17.64
75	424833	NM_003894	Hs.153405	period (Drosophila) homolog 2	4.22	3.13
	426248	T18988	Hs.293668	ESTs	4.21	4.09
	410480	R97457	Hs.63984	cadherin 13, H-cadherin (heart)	4.19	2.76
	406805	AI686003	Hs.296031	ESTs	4.19	3.87
	438533	AI440266	Hs.170673	ESTs, Weakly similar to T24832 hypotheti	4.18	5.93
80	451831	NM_001674	Hs.460	activating transcription factor 3	4.18	4.74
	431211	M86849	Hs.323733	gap junction protein, beta 2, 26kD (conn	4.17	2.83
	434936	AI285970	Hs.183817	ESTs	4.17	4.39
	430361	AI033965	Hs.239926	sterol-C4-methyl oxidase-like	4.17	2.38
	448429	D17408	Hs.21223	calponin 1, basic, smooth muscle	4.16	5.15



5	421978	AJ243662	Hs.110196	NICE-1 protein	4.15	8.07
	437135	AL038624	Hs.208752	ESTs, Weakly similar to ALU8_HUMAN ALU S	4.14	4.92
	442554	AW467376	Hs.129640	ESTs	4.12	4.00
	451814	AA847992	Hs.137003	ESTs	4.11	4.58
	410023	AB017169	Hs.57929	sRt (Drosophila) homolog 3	4.10	3.92
10	457121	A743770	Hs.180513	ESTs, Weakly similar to KIAA0822 protein	4.09	3.19
	426539	AB011155	Hs.170290	discs, large (Drosophila) homolog 5	4.09	3.69
	430433	AA478883	Hs.273766	ESTs	4.07	4.49
	425992	AA367069	Hs.100636	ESTs	4.07	3.74
	428931	AA994979	Hs.58967	ESTs	4.06	4.37
15	452392	L20815	Hs.507	ATPase, H <sup>+</sup> -transporting, lysosomal, non comeosomesin	4.05	4.15
	402845			ENSP00000246267:KIAA0444 PROTEIN (FRAGME	4.04	11.00
	439873	BE159253	Hs.300638	ESTs	4.03	4.18
	432305	M62402	Hs.274313	ESTs	4.03	3.86
	420789	AI670057	Hs.199882	Insulin-like growth factor binding prote	4.02	8.79
20	453560	AA348626	Hs.5890	ESTs	4.02	4.34
	428957	NM_003881	Hs.194679	hypothetical protein FLJ23306	4.02	5.13
	429556	AW139399	Hs.98988	WNT1 inducible signaling pathway protein	4.01	4.29
	448585	AB020676	Hs.21543	ESTs	4.01	4.59
	403710			KIAA0869 protein	4.01	4.52
25	423634	AW959908	Hs.1690	C4000160:gi12735793[ref]XP_011928.1  pr	4.00	3.31
	421485	AA243499	Hs.104800	heparin-binding growth factor binding pr	3.98	6.61
	437611	AA897108		hypothetical protein FLJ10134	3.98	3.79
	426500	NM_014638	Hs.170156	gb:am08a06.s1 Soares_NFL_T_GBC_S1 Homo s	3.97	4.24
	448710	T62926	Hs.304184	KIAA0450 gene product	3.96	4.93
30	408199	AA132637	Hs.15396	ESTs	3.96	4.54
	428340	AF261088	Hs.154721	Homo sapiens, clone IMAGE:3948909, mRNA,	3.95	5.57
	410197	NM_005518	Hs.59889	aconitase 1, soluble	3.94	3.24
	456972	AI054347	Hs.2017	3-hydroxy-3-methylglutaryl-Coenzyme A sy	3.94	9.16
	418381	AA682393	Hs.119237	ribosomal protein L38	3.93	4.37
35	444781	NM_014400	Hs.11950	ESTs	3.93	3.45
	456332	AA228357		GPI-anchored metastasis-associated prote	3.92	15.00
	445607	AA488107	Hs.30156	gb:nc39d05.r1 NCL_CGAP_Py2 Homo sapiens	3.91	4.88
	426411	AK000708	Hs.169764	ESTs, Weakly similar to unnamed protein	3.91	3.19
	446733	AA863360	Hs.26040	hypothetical protein FLJ20701	3.90	4.50
40	442498	U54617	Hs.8364	ESTs, Weakly similar to fatty acid omega	3.90	3.89
	452894	AI598065	Hs.61558	Homo sapiens pyruvate dehydrogenase kina	3.89	5.11
	430570	AI417881	Hs.292464	ESTs	3.88	3.73
	439625	AF086453	Hs.58611	ESTs	3.87	4.47
	418793	AW382987	Hs.88474	ESTs	3.86	4.81
45	431247	AL021578	Hs.278489	prostaglandin-endoperoxide synthase 1 (p	3.85	3.01
	426350	NM_003245	Hs.2022	matrilin 4	3.85	3.35
	441319	AI354869	Hs.133081	transglutaminase 3 (E polypeptide, prote	3.85	5.15
	452877	AI250789	Hs.32478	ESTs, Weakly similar to T08700 hypotheti	3.84	5.03
	444252	R21135	Hs.54985	ESTs	3.84	3.26
50	416265	AA177088	Hs.190065	ESTs	3.83	5.58
	418875	WI9971	Hs.233459	ESTs	3.82	3.87
	440509	BE410132	Hs.134202	ESTs	3.80	2.92
	442503	AF147078	Hs.150853	ESTs, Weakly similar to T17279 hypotheti	3.80	4.36
	427081	AI474533	Hs.170528	p53-responsive gene 5	3.80	7.53
55	458222	AW139592		ESTs, Moderately similar to ALUC_HUMAN!	3.77	4.81
	445107	AI208121	Hs.147313	hypothetical protein DKFZp434K1421	3.77	3.58
	436283	AI480319	Hs.120058	ESTs, Weakly similar to I38022 hypotheti	3.77	3.20
	436557	W15573	Hs.5027	ESTs	3.76	3.76
	448988	Y09763	Hs.22785	ESTs, Weakly similar to A47582 B-cell gr	3.76	2.65
60	434206	AW136973		gamma-aminobutyric acid (GABA) A recepto	3.75	7.59
	424824	AI217440	Hs.143873	ESTs, Weakly similar to S69890 mitogen i	3.72	3.96
	457411	AW085961	Hs.130093	ESTs	3.72	3.52
	452241	AL050204	Hs.28540	Iroquois-class homeobox protein IRX2	3.71	3.05
	421845	AW021631	Hs.16515	Homo sapiens mRNA; cDNA DKFZp586F1223 (f	3.70	4.84
65	413922	AI535895	Hs.221024	ESTs	3.69	3.59
	422746	NM_004484	Hs.119651	ESTs	3.68	4.22
	433934	AW273261	Hs.216292	glypican 3	3.68	4.29
	452547	AA335295	Hs.74120	ESTs	3.68	4.39
	400295	W72838		adipose specific 2	3.66	12.23
70	417054	AF017060		AI905687:IL-BT095-190199-019 BT095 Homo	3.66	9.25
	423974	AL118754		ESTs	3.66	4.94
	431362	AI874223	Hs.293560	aldehyde oxidase 1	3.65	4.51
	420506	AW977779	Hs.194613	gb:DKFZp761P1910_r1 761 (synonym: hamy2)	3.65	4.32
	448065	AI459177	Hs.172759	ESTs	3.65	3.73
75	437457	AA757900	Hs.270823	ESTs	3.65	3.25
	451951	AW082870	Hs.210954	ESTs, Moderately similar to ALU7_HUMAN A	3.64	4.62
	436879	AI27483	Hs.120451	ESTs, Weakly similar to S65657 alpha-1-C-	3.64	4.54
	412676	NM_000165	Hs.74471	ESTs	3.64	3.69
	412668	AA456195		ESTs, Weakly similar to unnamed protein	3.64	3.39
80	413899	AF083892	Hs.75608	gap junction protein, alpha 1, 43kD (con	3.62	3.62
	444726	NM_006147		hypothetical protein FLJ14621	3.62	4.22
	428722	U76456	Hs.190787	tighi junction protein 2 (zona occludens	3.62	3.06
	429973	AI423317	Hs.164680	interferon regulatory factor 6	3.59	10.65
	452413	AW082633	Hs.215030	tissue inhibitor of metalloproteinase 4	3.59	3.31
	416157	NM_003243	Hs.342874	ESTs	3.59	3.71
				transforming growth factor, beta recepto	3.58	4.66
					3.58	4.44

	430397	A1924533	Hs.105607	bicarbonate transporter related protein	3.57	3.74
	411939	A1365585	Hs.146246	ESTs	3.57	12.42
	450353	A1244661	Hs.103296	ESTs, Weakly similar to S65657 alpha-1C-	3.57	4.11
	432406	A1340571	Hs.343666	KIAA0969 protein	3.57	2.84
5	439609	AW971945	Hs.293236	ESTs	3.56	3.14
	435381	AW136397	Hs.175382	ESTs	3.56	3.48
	410173	AA706017	Hs.119944	ESTs	3.56	3.37
	414002	NM_006732	Hs.75678	FBJ murine osteosarcoma viral oncogene h	3.56	9.93
10	413305	NM_000426	Hs.323511	Homo sapiens cDNA: FLJ23176 fs, clone L	3.55	4.24
	434360	AWD15415	Hs.127780	ESTs	3.55	4.77
	423973	AF038461	Hs.136574	arachidonate 12-Epoxygenase, 12R type	3.53	5.65
	425681	AB018297	Hs.159183	KIAA0754 protein	3.52	4.79
	428382	AF007132	Hs.184019	Homo sapiens clone 23551 mRNA sequence	3.51	4.46
	451184	T87943		transcription factor 7-like 2 (T-cell sp	3.51	3.63
15	448496	BE379077	Hs.130849	ESTs, Weakly similar to I38022 hypothe	3.51	3.30
	425831	U46689	Hs.159608	aldehyde dehydrogenase 3 family, member	3.48	8.66
	428232	BE272452	Hs.183109	monoamine oxidase A	3.48	9.54
	425483	AF231022	Hs.158159	FAT tumor suppressor (Drosophila) homolo	3.48	6.05
	401760			Target Exon	3.48	7.86
20	427899	AA829286	Hs.332053	serum amyloid A1	3.47	3.67
	451767	A1625014	Hs.187328	ESTs	3.46	3.85
	452849	AF044924	Hs.30792	hook2 protein	3.45	5.66
	427408	AA583206	Hs.2156	RAR-related orphan receptor A	3.45	5.02
	447165	AL042400	Hs.75668	Homo sapiens, Similar to RIKEN cDNA 1700	3.45	3.61
25	422083	NM_001141	Hs.111256	arachidonate 15-Epoxygenase, second typ	3.45	7.71
	420876	AA918425	Hs.177744	ESTs	3.44	8.46
	421114	AW975051	Hs.293156	ESTs, Weakly similar to I78885 serine/th	3.44	4.47
	426233	AA372796	Hs.269339	ESTs, Weakly similar to AF161356 1 HSPC0	3.44	3.96
	428221	U96781	Hs.183075	ATPase, Ca transporting, cardiac muscle,	3.42	4.32
30	403593			Target Exon	3.42	6.35
	423467	AK000214	Hs.129014	hypothetical protein FLJ20207	3.42	3.34
	447731	AA373527	Hs.19385	CGI-58 protein	3.41	2.44
	456327	H68741	Hs.38774	ESTs	3.40	3.46
35	413880	A1660842	Hs.110915	interleukin 22 receptor	3.37	3.61
	429501	A1700588	Hs.293388	ESTs, Weakly similar to A34612 zinc fing	3.37	3.44
	437575	AW954355	Hs.36529	hypothetical protein MGC11242	3.36	4.87
	420231	R06866	Hs.19813	ESTs	3.36	8.60
	424010	AL080188	Hs.137556	Homo sapiens mRNA: cDNA DKFZp434A132 (fr	3.36	6.20
40	426789	F06396	Hs.23837	Homo sapiens cDNA FLJ11812 fs, clone HE	3.34	3.40
	434274	AA628539	Hs.116252	ESTs, Moderately similar to ALU1_HUMAN A	3.34	3.35
	420693	NM_001972	Hs.99863	elastase 2, neutrophil	3.34	4.06
	418318	U47732	Hs.84072	transmembrane 4 superfamily member 3	3.33	4.36
	413163	YD0815	Hs.75216	protein tyrosine phosphatase, receptor 1	3.32	9.47
45	428496	AA769986	Hs.185802	ESTs	3.32	3.88
	416349	X69089	Hs.79227	myomesin (M-protein) 2 (165kD)	3.31	4.01
	409095	AW337272	Hs.293656	ESTs, Moderately similar to S72481 proba	3.31	3.31
	443072	A1937532		gb:wp78d02x1 NCI_CGAP_Bm25 Homo sapien	3.31	4.40
	437596	AA761490		ESTs, Moderately similar to S65657 alpha	3.30	5.31
50	444094	A1695764	Hs.202394	ESTs	3.29	3.47
	437150	R51407	Hs.77910	3-hydroxy-3-methylglutaryl-Coenzyme A sy	3.29	3.76
	407334	AA494411	Hs.296031	ESTs	3.28	4.30
	423017	AW178761	Hs.227948	serine (or cysteine) proteinase inhibito	3.28	3.78
	447875	R22029	Hs.13905	ESTs	3.28	3.44
55	418969	W33191	Hs.28907	hypothetical protein FLJ20258	3.27	3.71
	411962	AA099050		gb:zk85d12r1 Soares_pregnant_uterus_NbH	3.27	4.28
	424395	AA165082	Hs.146388	microtubule-associated protein 7	3.27	3.82
	400494			ENSP00000238970:ClG30 (Fragment).	3.27	2.60
	430418	R98852	Hs.36029	heart and neural crest derivatives expe	3.26	6.19
60	409231	AA446644	Hs.692	GA733-2 antigen: epithelial glycoprotein	3.26	4.24
	434952	T10269	Hs.4285	Homo sapiens cDNA: FLJ22505 fs, clone H	3.26	5.17
	445234	AW137636	Hs.146059	ESTs	3.25	5.59
	426150	NM_003658	Hs.167218	BarH-like homeobox 2	3.25	5.21
	400076			Eos Control	3.25	3.60
65	421462	AF016495	Hs.104624	aquaporin 9	3.25	3.93
	420677	AW086215	Hs.246096	ESTs	3.25	3.53
	424125	M31669	Hs.1735	inhibin, beta B (activin AB beta polypep	3.24	3.88
	443672	AA323362	Hs.9667	butyrobetaine (gamma), 2-oxoglutarate di	3.24	5.64
	420682	A1380552	Hs.88602	ESTs	3.24	4.13
70	423725	AJ403108	Hs.132127	hypothetical protein LOC57822	3.23	4.90
	431157	A1823969	Hs.132678	ESTs	3.23	3.97
	440469	AA885068		gb:ny40e07.s1 NCI_CGAP_Pr12 Homo sapiens	3.23	3.39
	449961	AW265634	Hs.133100	ESTs	3.21	5.36
	407948	AW085161	Hs.56279	ICEBERG caspase-1 inhibitor	3.21	4.61
75	400835			chromosome 2 open reading frame 2	3.21	3.62
	413329	A1056885	Hs.133539	ESTs	3.21	3.43
	414825	X06370	Hs.77432	epidermal growth factor receptor (avian	3.21	3.72
	450860	AA021007		integrin, beta 8	3.20	5.89
	444816	Z48633	Hs.283742	H.sapiens mRNA for retrotransposon	3.19	6.84
80	453855	AA039576	Hs.37858	ESTs, Weakly similar to ALUB_HUMAN !!!	3.19	3.59
	432278	AL137506	Hs.274256	hypothetical protein FLJ23563	3.19	3.51
	420074	AA253425	Hs.190074	ESTs	3.18	5.50
	418481	M81945		CD34 antigen	3.18	3.65
	408522	AI541214	Hs.46320	Small proline-rich protein SPRK (human,	3.18	7.43

5	435337	AJ078307	Hs.134317	ESTs, Weakly similar to PC4259 lentin	3.17	3.51
	445502	AW379160	Hs.12813	DKFZP434J214 protein	3.17	3.62
	412477	AA150864		microsomal glutathione S-transferase 1	3.17	5.39
	421757	Z20897	Hs.296259	paraionase 3	3.16	3.60
	413835	AJ272727	Hs.249163	fatty acid hydroxylase	3.16	5.56
10	420309	AW043637	Hs.21766	ESTs, Weakly similar to ALUS_HUMAN ALU S	3.15	1.99
	444895	AI674383	Hs.22891	solute carrier family 7 (cationic amino	3.15	4.45
	414869	AA157291	Hs.21479	ubiquitin 1	3.13	4.40
	412947	AA122277		gb:cd97e09.s1 Soares_pregnant_uterus_NbH	3.13	3.30
	443265	AJ916207	Hs.9167	SH3 domain binding glutamic acid-rich pr	3.12	4.62
15	421335	X99977	Hs.103505	ARS component B	3.11	11.54
	401905			ENSP00000252232: Sterol regulatory elem	3.10	2.85
	443514	BE464288	Hs.141937	ESTs	3.09	3.66
	418817	AA913229	Hs.19339	ESTs	3.08	3.88
	434727	H43374	Hs.7890	Homo sapiens mRNA for KIAA1671 protein,	3.08	4.18
20	435858	AF254260	Hs.283009	tuftelin 1	3.08	3.96
	430285	AJ917602	Hs.106440	ESTs	3.07	3.30
	448106	AI800470	Hs.171941	ESTs	3.07	5.19
	432908	AI851896		ESTs	3.07	3.85
	450086	AW016343	Hs.233301	ESTs	3.07	3.38
25	451529	AJ917901	Hs.208641	ESTs	3.07	3.29
	418443	NM_005239	Hs.85146	v-ets avian erythroblastosis virus E26 o	3.06	4.12
	426848	H72531	Hs.36190	ESTs	3.05	4.34
	429506	D49835	Hs.171942	ras responsive element binding protein 1	3.05	3.97
	425955	T96509	Hs.248549	ESTs, Moderately similar to S66657 alpha	3.05	3.29
30	413822	R08950	Hs.272044	ESTs, Weakly similar to ALU1_HUMAN ALU S	3.05	3.89
	434230	AA551569		hypothetical protein PRO2822	3.04	3.63
	453655	AW960427	Hs.342874	transforming growth factor, beta recepto	3.04	8.09
	415696	AI821552	Hs.188682	ESTs	3.03	3.43
	449618	AI076459	Hs.15978	KIAA1272 protein	3.01	3.29
35	414665	AA160873		serum amyloid A1	3.01	9.22
	446682	AW205632	Hs.211198	ESTs	3.00	3.30
	443801	AW206942	Hs.253594	intron of: trichorhinophalangeal syndro	2.99	3.74
	412446	AI768015		ESTs	2.99	4.47
	449271	AW338067	Hs.7869	Homo sapiens cDNA FLJ11946 fis, clone HE	2.99	4.35
40	435702	AI033647	Hs.121001	Homo sapiens, clone IMAGE:3460280, mRNA	2.98	3.49
	403180			Target Exon	2.98	3.92
	434442	AA737415		ESTs	2.98	3.61
	439593	BE073597	Hs.124863	ESTs	2.98	3.86
	410453	AW749036		gb:RC2-BT0318-241199-011-410 BT0318 Homo	2.98	3.49
45	414766	AW293452	Hs.16228	ESTs	2.97	3.63
	432566	AW439330	Hs.256889	ESTs, Weakly similar to 2109260A B cell	2.97	3.99
	451541	BE279383	Hs.26557	plakophilin 3	2.97	6.90
	452195	AA994712	Hs.116878	ESTs	2.97	3.30
	401747			Homo sapiens keratin 17 (KRT17)	2.97	4.10
50	431316	AA502663	Hs.145037	ESTs	2.96	3.05
	445437	AJ224165	Hs.148725	ESTs	2.95	7.12
	421690	AW162667	Hs.106857	calbindin 2, (29kD, catretinin)	2.95	5.68
	456371	S76825	Hs.89695	insulin receptor	2.94	4.59
	449543	AF070632	Hs.23729	Homo sapiens clone 24405 mRNA sequence	2.94	4.12
55	436664	AW197887	Hs.253353	ESTs	2.93	3.57
	406962	M13485		gb:Human metallothionein I-B gene, exon	2.93	2.66
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	2.92	7.48
	428769	AW207175	Hs.106771	ESTs	2.92	3.28
	414629	AA345824	Hs.76688	carboxylesterase 1 (monocyte/macrophage	2.92	3.48
60	444204	AI129194	Hs.143040	ESTs	2.92	3.92
	421407	T82331	Hs.182278	ESTs, Weakly similar to CGHU6C collagen	2.91	6.55
	453180	N46243	Hs.110373	ESTs, Highly similar to T42626 secreted	2.90	3.92
	429538	BE182592	Hs.139322	small proline-rich protein 2A	2.88	4.75
	452554	AW452434	Hs.58006	ESTs, Weakly similar to ALUS_HUMAN ALU S	2.88	6.74
65	417184	N52510	Hs.268597	Homo sapiens cDNA: FLJ21498 fis, clone C	2.87	3.97
	412093	BE242691	Hs.14947	ESTs	2.86	3.48
	424135	AW994455	Hs.140978	Homo sapiens mRNA; cDNA DKFZp762H106 (fr	2.86	3.32
	437167	AL050184	Hs.21610	DKFZP434B203 protein	2.86	3.87
	454065	BE394588		gb:601311808F1 NIH_MGC_44 Homo sapiens c	2.86	3.43
70	420230	AL034344	Hs.284186	forkhead box C1	2.85	3.67
	403108			ENSP00000241415: Hypothetical 67.7 kDa p	2.85	2.62
	434433	AW629759		gb:hh70e05.y1 NCI_CGAP_GU1 Homo sapiens	2.84	3.35
	420544	AA677577	Hs.98732	Homo sapiens Chromosome 16 BAC clone C1T	2.83	2.66
	429429	AA629725	Hs.334437	hypothetical protein MGC4248	2.83	3.59
75	451721	NM_006946	Hs.26915	spectrin, beta, non-erythrocytic 2	2.83	3.36
	424982	U94777		phosphorylase, glycogen; muscle (McArdle	2.83	4.50
	429259	AA420450	Hs.292911	Plakophilin	2.81	4.81
	423523	AW299828	Hs.193580	ESTs	2.80	7.08
	433637	AW024214	Hs.102307	ESTs	2.80	3.39
80	452089	T97294	Hs.271492	ESTs, Weakly similar to PC42111 hepatocel	2.80	3.62
	441187	AW195237	Hs.7734	hypothetical protein FLJ22174	2.80	3.52
	421965	AA301100	Hs.346482	gb:EST14128 Testis tumor Homo sapiens cD	2.79	3.49
	432098	AF252297	Hs.91546	cytochrome P450 retinoid metabolizing pr	2.79	2.31
	429128	AA446869	Hs.119316	ESTs	2.78	4.17
	438913	AI380429	Hs.172445	ESTs	2.77	3.65
	445029	AF196481		midline 2	2.76	3.79
	419923	AW081455	Hs.120219	ESTs	2.76	3.00

5	416508	R39769	Hs.56406	ESTs, Moderately similar to ALU8_HUMAN A	2.76	3.59
	412507	L36645	Hs.73964	EphA4	2.76	3.90
	446339	ALD46962	Hs.14845	forkhead box O3A	2.75	3.50
	433710	AJ341867	Hs.188920	ESTs	2.75	3.33
	432375	BE536089	Hs.2962	S100 calcium-binding protein P	2.74	5.77
	409213	U61412	Hs.51133	PTK6 protein tyrosine kinase 6	2.74	3.76
	426653	AA530892	Hs.171696	dual specificity phosphatase 1	2.74	8.19
	408839	AW277084		gb-xp61h09.x1 NCI_CGAP_Ov39 Homo sapiens	2.73	3.93
10	433091	Y12642	Hs.3185	lymphocyte antigen 6 complex, locus D	2.73	11.46
	444026	AA205759	Hs.10119	hypothetical protein FLJ14957	2.73	6.17
	433713	AW976511	Hs.112592	ESTs	2.72	3.42
	453317	NM_002277	Hs.41696	keratin, hair, acidic, 1	2.72	4.76
	408493	BE206854	Hs.46039	phosphoglycerate mutase 2 (muscle)	2.72	3.74
	432947	AA570710	Hs.270998	ESTs, Weakly similar to I38022 hypotheti	2.72	3.44
15	421428	U26726	Hs.1376	hydroxysteroid (11-beta) dehydrogenase 2	2.72	4.95
	423217	NM_000094	Hs.1640	collagen, type VII, alpha 1 (epidermolys	2.72	4.29
	435016	AI284219	Hs.130749	ESTs, Weakly similar to I38022 hypotheti	2.71	4.45
	449667	AB023227	Hs.23860	KIAA1010 protein	2.71	3.72
20	407112	AA070801	Hs.51615	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.70	3.82
	433648	AF095719	Hs.93764	carboxypeptidase A4	2.70	2.76
	430152	AB001325	Hs.234642	aquaporin 3	2.69	4.26
	456063	NM_006744	Hs.76461	retinol-binding protein 4, interstitial	2.69	6.72
	424471	AA341329	Hs.311524	ESTs	2.68	4.57
25	453201	AI432195	Hs.135098	ESTs	2.68	3.69
	450912	AW939251	Hs.25647	v-fos FBJ murine osteosarcoma viral onco	2.68	4.25
	404996			Target Exon	2.67	4.28
	409453	AI885516	Hs.95612	ESTs	2.65	6.51
30	430937	X53463	Hs.2704	glutathione peroxidase 2 (gastrointestin	2.65	3.78
	452887	AI702223	Hs.107253	hypothetical protein DKF Zp761F241	2.64	6.38
	444169	AV648170	Hs.58756	ESTs	2.64	3.40
	428500	AI815395	Hs.184641	fatty acid desaturase 2	2.64	3.47
	408395	BE072425	Hs.44579	hypothetical protein FLJ20199	2.64	4.01
	432093	H28383		gb-y152-c03.r1 Soares breast 3NbHBst Homo	2.63	4.08
35	451621	AI879148	Hs.26770	fatty acid binding protein 7, brain	2.62	2.51
	447335	BE617695	Hs.286192	hypothetical protein FLJ20940	2.61	3.62
	429343	AK000785	Hs.199480	Homo sapiens, Similar to epsin 3, clone	2.61	3.68
	431166	AW971186	Hs.293839	ESTs	2.61	3.33
	440659	AF134160	Hs.7327	claudin 1	2.61	3.53
40	413542	BE295928	Hs.75424	inhibitor of DNA binding 1, dominant neg	2.61	4.48
	413956	AI821351	Hs.193133	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.60	3.51
	407299	AA460205	Hs.289770	ESTs, Weakly similar to I38022 hypotheti	2.59	3.82
	449539	W80363	Hs.58446	ESTs	2.58	4.05
	413884	AI668892	Hs.239758	hypothetical protein FLJ12389 similar to	2.58	4.19
45	445620	AI245225	Hs.17441	ESTs	2.57	3.44
	433688	AA628467	Hs.112572	Homo sapiens cDNA FLJ14130 fis, clone MA	2.56	3.57
	424834	AK001432	Hs.153408	Homo sapiens cDNA FLJ10570 fis, clone NT	2.56	3.47
	407083	Z48511		H.sapiens XG mRNA (clone PEP11)	2.55	3.61
	406790	AA293303		ribosomal protein L27a	2.54	4.36
50	450472	AI190071	Hs.55278	ESTs	2.54	4.30
	410310	J02931	Hs.62192	coagulation factor III (thromboplastin,	2.54	3.82
	454034	NM_000691	Hs.575	aldehyde dehydrogenase 3 family, member	2.54	3.44
	430821	AA487264	Hs.154974	Homo sapiens mRNA: cDNA DKF Zp667N064 (fr	2.54	4.55
	402575			Rho GTPase activating protein 1	2.53	5.47
55	429554	NM_012275	Hs.207224	Interleukin 1, delta	2.53	2.40
	431631	AA548906	Hs.122244	ESTs	2.52	3.79
	408806	AW847814	Hs.75608	Homo sapiens cDNA: FLJ21532 fis, clone C	2.52	4.51
	420235	AA256756	Hs.31178	ESTs	2.51	4.21
	436314	AI983409		ESTs	2.51	3.11
60	432906	BE265489	Hs.3123	lethal giant larvae (Drosophila) homolog	2.50	5.62
	429547	AW009166	Hs.99376	FCGENESH predicted novel secreted protein	2.49	2.60
	410532	TS3088	Hs.155376	hemoglobin, beta	2.49	4.73
	413475	AW021488	Hs.26981	ESTs	2.49	3.90
	429325	AW088739	Hs.243770	ESTs	2.48	3.71
65	424604	AW855388	Hs.151076	KIAA1243 protein	2.48	4.16
	414320	U13616	Hs.75893	ankyrin 3, node of Ranvier (ankyrin G)	2.48	3.80
	423929	M69136	Hs.135626	chymase 1, mast cell	2.48	3.47
	410275	U85658	Hs.61796	transcription factor AP-2 gamma (activat	2.47	2.09
	444935	AA262449	Hs.223569	ESTs	2.47	5.96
70	445389	NM_016831	Hs.12592	period (Drosophila) homolog 3	2.47	3.41
	437897	AA770561	Hs.146170	hypothetical protein FLJ22969	2.47	6.80
	446292	AF081497	Hs.279682	Rh type C glycoprotein	2.46	7.37
	409178	BE393948	Hs.50915	kallikrein 5	2.46	5.59
	452865	AI924046	Hs.119567	ESTs, Weakly similar to A47582 B-cell gr	2.46	6.03
75	447179	AW015633	Hs.157299	ESTs	2.46	3.23
	414459	Y11525	Hs.76171	C/CAAT/enhancer binding protein (C/EBP,	2.46	3.95
	428188	M98447	Hs.22	transglutaminase 1 (K polypeptide epider	2.45	3.94
	428593	AW207440	Hs.185973	degenerative spermatocyte (homolog Dros	2.44	2.17
	435009	H57130	Hs.120925	ESTs	2.44	2.94
80	412810	M21574	Hs.74615	platelet-derived growth factor receptor,	2.43	3.61
	416749	AW068550.comp	Hs.79732	fibulin 1	2.43	4.46
	444672	Z95636	Hs.11669	laminin, alpha 5	2.42	6.39
	433143	BE552155	Hs.294035	ESTs, Weakly similar to ALU5_HUMAN ALU S	2.42	3.45
	406997	U07807		metallothionein IV	2.42	3.92

5	423184	NM_004428	Hs.1524	ephrin-A1	2.41	4.34
	421321	NM_005309	Hs.103502	glutamic-pyruvate transaminase (alanine	2.41	5.08
	456826	AI871742	Hs.302428	wingless-type MMTV integration site fami	2.41	3.92
	428897	AJ245719	Hs.194385	hypothetical protein FLJ20234	2.41	5.18
	400232			NM_001895*Homo sapiens casein kinase 2,	2.41	3.82
	421481	AW391972	Hs.104696	KIAA1324 protein	2.40	4.03
	442083	R50192	Hs.165062	ESTs	2.39	4.21
	422287	F16365	Hs.114346	cytochrome c oxidase subunit VIIa polype	2.39	8.60
10	418004	U37519	Hs.87539	aldehyde dehydrogenase 3 family, member	2.39	2.57
	457008	AA410446	Hs.112011	ESTs, Weakly similar to unknown (H.sapie	2.39	3.85
	418355	L42563	Hs.1165	ATPase, H7 transporting, nongastric, alp	2.38	3.84
	431179	AI338644	Hs.195432	aldehyde dehydrogenase 2 family (mitocho	2.37	7.89
	432563	NM_013261	Hs.198468	peroxisome proliferative activated recep	2.37	3.77
15	402338			Target Exon	2.37	3.46
	443725	AW245680	Hs.9701	growth arrest and DNA-damage-inducible,	2.37	4.57
	435723	AW975895	Hs.307486	ESTs	2.37	6.39
	452669	AA216363	Hs.262958	hypothetical protein DKFZp4348044	2.37	3.92
	409212	AI082423	Hs.141892	ESTs	2.36	3.79
20	451323	AI903313	Hs.34579	ESTs, Moderately similar to ALU6_HUMAN A	2.35	3.29
	400307	AF005081		Homo sapiens skin-specific protein (x32	2.35	9.96
	421993	R22497	Hs.110571	growth arrest and DNA-damage-inducible,	2.35	5.16
	451092	AI207256	Hs.13766	Homo sapiens mRNA for FLJ00074 protein,	2.34	5.24
	445948	BE409053	Hs.299629	peroxisomal long-chain acyl-coA thioeste	2.34	3.77
25	424425	AB031480	Hs.146824	SPR1 protein	2.34	4.43
	426050	AF017307	Hs.166095	E74-like factor 3 (ets domain transcript	2.34	5.64
	425180	U00115	Hs.155024	B-cell CLL/lymphoma 6 (zinc finger prote	2.33	3.51
	422106	D84239	Hs.111732	Fc fragment of IgG binding protein	2.33	6.95
	423503	M92843	Hs.343586	zinc finger protein homologous to Zfp-36	2.33	5.57
30	453999	BE328153	Hs.240087	ESTs	2.32	3.40
	419358	T78763	Hs.90063	neurocalcin delta	2.32	6.72
	430468	NM_004673	Hs.241519	angiotensin-like 1	2.32	3.90
	456876	AL044870	Hs.208780	ESTs, Weakly similar to T29647 hypothesi	2.32	3.27
	454947	AW846590		gb:QV0-CT0180-011099-025-d07 CT0180 Homo	2.32	4.43
35	429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	2.31	7.22
	438282	BE268288	Hs.195432	aldehyde dehydrogenase 2 family (mitocho	2.31	3.34
	420202	AL036557	Hs.95910	putative lymphocyte G0/G1 switch gene	2.31	8.47
	419245	AI732742	Hs.87440	ESTs	2.31	3.39
	444920	AW450967	Hs.235240	ESTs	2.30	3.30
40	417314	N68168		gb:za11c01.s1 Soares fetal liver spleen	2.30	3.12
	409586	AL050214	Hs.55044	DKFZP586H2123 protein	2.30	3.52
	433662	W07162	Hs.150826	RAB25 RAB25, member RAS oncogene family	2.29	6.11
	451176	AA046457	Hs.60677	ESTs	2.29	6.59
	410531	AW752953		gb:QV0-CT0224-261099-035-g02 CT0224 Homo	2.29	3.29
45	425882	R05327	Hs.189726	ESTs	2.29	3.37
	435684	NM_001290	Hs.4980	UIM domain binding 2	2.29	4.54
	453003	AA808466	Hs.103395	hypothetical protein FLJ14146	2.28	3.70
	434411	AA632649	Hs.201372	ESTs	2.28	4.40
	407394	AF005081		gb:Homo sapiens skin-specific protein (x	2.28	10.57
50	411579	AC005258	Hs.70830	U6 snRNA-associated Sm-like protein LSM7	2.28	4.06
	401205			Target Exon	2.27	2.71
	443102	AI247472	Hs.132965	ESTs	2.27	5.66
	422109	S73265	Hs.1473	gastrin-releasing peptide	2.26	3.94
	434987	AW975114		ESTs	2.26	3.72
55	415477	NM_002228	Hs.78465	v-jun avian sarcoma virus 17 oncogene ho	2.26	3.42
	423515	AA327017	Hs.176594	ESTs	2.25	6.21
	434903	AF161369	Hs.187763	Homo sapiens HSPC106 mRNA, partial cds	2.25	3.62
	443049	AI028613	Hs.132343	ESTs	2.25	3.13
	444637	T19101	Hs.11494	fibulin 5	2.24	6.43
60	410026	AI912061	Hs.55016	hypothetical protein FLJ21935	2.23	3.31
	418629	BE247550	Hs.86859	growth factor receptor-bound protein 7	2.23	4.17
	429587	AA283969	Hs.334706	Homo sapiens cDNA FLJ11801 fs, clone HE	2.23	3.79
	431986	AA536130	Hs.149018	Novel human gene mapping to chromosome 20	2.22	3.54
	409571	AA504249	Hs.187585	ESTs	2.22	3.87
65	446051	BE048061	Hs.37054	ephrin-A3	2.22	4.57
	422418	AK001383	Hs.116385	hypothetical protein FLJ10521	2.21	4.25
	453023	AW028733	Hs.31439	serine protease inhibitor, Kunitz type,	2.21	5.07
	435748	AA699756	Hs.117335	ESTs	2.20	3.35
	420105	AW015571	Hs.32244	ESTs, Weakly similar to FMOD_HUMAN FIBRO	2.19	6.55
70	444922	AI921750	Hs.144871	Homo sapiens cDNA FLJ13752 fs, clone PL	2.19	3.51
	433052	AW971983	Hs.293003	ESTs, Weakly similar to PC4259 ferritin	2.19	3.32
	430310	U60115	Hs.239069	four and a half UIM domains 1	2.19	3.83
	447205	BE617015	Hs.11006	ESTs, Moderately similar to T17372 plasm	2.19	15.65
	449967	R40978	Hs.271498	ESTs, Moderately similar to ALU1_HUMAN A	2.18	3.54
	452689	F33868	Hs.284176	transferrin	2.18	3.30
75	417061	AI675944	Hs.188691	Homo sapiens cDNA FLJ12033 fs, clone HE	2.18	3.77
	432647	AI807481	Hs.278581	fibroblast growth factor receptor 2 (bac	2.18	5.64
	401192			Target Exon	2.17	3.33
	421752	AK001521	Hs.107882	hypothetical protein FLJ10659	2.16	3.44
80	456646	AJ243562	Hs.110196	NICE-1 protein	2.16	2.39
	421263	AB020638	Hs.103000	KIAA0831 protein	2.16	3.37
	445656	W22050	Hs.21299	ESTs, Weakly similar to AF151840 1 CGI-8	2.16	5.17
	450624	AL043983	Hs.125063	Homo sapiens cDNA FLJ13825 fs, clone TH	2.15	3.87
	429350	AI754534	Hs.131987	ESTs	2.15	3.90

	448144	AW169230		ESTs, Moderately similar to PC4259 term	2.14	3.28
	429002	AW248439	Hs.2340	junction plakoglobin	2.14	5.05
	429297	X82494	Hs.198862	fibulin 2	2.14	4.32
5	452093	AA447453	Hs.27860	Homo sapiens mRNA: cDNA DKFZp585M0723 (f	2.14	3.99
	428848	NM_000230	Hs.194235	lepin (murine obesity homolog)	2.14	3.39
	407584	W25945	Hs.8173	hypothetical protein FLJ10803	2.14	3.38
	453155	AF052126	Hs.552	steroid-5-alpha-reductase, alpha polypep	2.14	2.51
	453283	AA694386	Hs.290914	ESTs	2.13	3.28
10	456906	AF117646	Hs.156637	Cas-BR-M (murine) ectropic retroviral tr	2.13	3.76
	414815	AW292140	Hs.130286	ESTs	2.13	4.16
	417155	T75125	Hs.299148	hypothetical protein FLJ21801	2.13	3.57
	416673	T77052	Hs.14039	ESTs	2.13	3.43
	452208	AA024792	Hs.31895	hypothetical protein MGC4093	2.12	5.67
15	413966	AA133935	Hs.173704	ESTs, Moderately similar to AS3959 throm	2.12	4.76
	430967	H16791	Hs.100895	ESTs	2.12	2.64
	429015	BE168484	Hs.194737	KIAA0453 protein	2.12	3.30
	439518	W76326		gb:zd50d04.1 Soares_fetal_heart_NbHH19W	2.11	2.59
	426468	AA379306	Hs.117558	ESTs	2.10	3.56
20	407555	Z48511		gb:H.sapiens XG mRNA (clone PEP11).	2.10	3.66
	418226	AA424202	Hs.83834	cytochrome b-5	2.10	5.14
	423441	R68649	Hs.278359	absent in melanoma 1 like	2.10	3.64
	436961	AV375974	Hs.156704	ESTs	2.10	3.21
	432633	AI796390	Hs.210667	ESTs	2.10	2.58
	426102	AF200496	Hs.166371	interleukin 1, zeta	2.09	3.77
25	445467	AI239832	Hs.15617	ESTs, Weakly similar to ALU4_HUMAN ALU S	2.09	3.85
	437124	AA54458		KIAA0666 protein	2.09	3.35
	407757	BE048414	Hs.165215	hypothetical protein MGC5395	2.08	4.41
	407815	AW373860	Hs.183860	hypothetical protein FLJ20277	2.08	5.01
	443906	AA348031	Hs.7913	ESTs	2.08	3.40
30	423887	AL080207	Hs.134585	DKFZP434G232 protein	2.08	3.92
	406400			kallikrein 8 (neurosin/ovasin) (KLK8)	2.08	4.19
	437704	AA766142	Hs.131810	ESTs, Moderately similar to ALU1_HUMAN A	2.07	3.30
	412533	AA679863	Hs.69606	ESTs	2.07	3.39
	426310	NM_000909	Hs.169266	neuropeptide Y receptor Y1	2.06	3.55
35	411821	BE299339	Hs.72249	three-PD2 containing protein similar to	2.06	4.98
	442599	AF078037	Hs.324051	RelA-associated inhibitor	2.06	7.23
	432212	AW137742		ESTs	2.04	3.52
	453469	AB014533	Hs.33010	KIAA0633 protein	2.04	4.01
40	443652	AI080892	Hs.134229	ESTs, Weakly similar to I54401 hypertens	2.04	3.36
	452955	AW390282	Hs.31130	transmembrane 7 superfamily member 2	2.03	3.64
	424464	R68537	Hs.17962	ESTs	2.03	4.36
	408702	AW959893	Hs.27099	hypothetical protein FLJ23293 similar to	2.03	3.31
	439908	AI168031	Hs.155507	ESTs	2.03	3.83
45	412825	AW167439	Hs.190651	Homo sapiens cDNA FLJ13625 fis, clone PL	2.02	5.56
	406784	AI144297	Hs.169401	apolipoprotein E	2.02	3.40
	427309	NM_005714	Hs.175218	potassium channel, subfamily K, member 7	2.02	4.58
	453195	BE241876	Hs.32352	hypothetical protein DKFZP434K1210	2.02	3.57
	404246			Target Exon	2.01	7.30
50	443679	AK001810	Hs.9670	hypothetical protein FLJ10948	2.01	5.81
	410669	AW905749		superoxide dismutase 2, mitochondrial	2.01	3.05
	446193	AI279390	Hs.144658	ESTs, Weakly similar to T17257 hypothi	2.01	2.32
	449228	AJ403107	Hs.148590	protein related with psoriasis	2.00	5.10
	434346	AA630445		ESTs	2.00	3.51
55	456098	AW747800	Hs.55016	hypothetical protein FLJ21935	2.00	4.96
	452467	AW500815		ESTs	2.00	4.68
	442866	AJ743317	Hs.283622	ESTs, Weakly similar to ALU5_HUMAN ALU S	1.98	3.72
	434699	AA643687	Hs.149425	Homo sapiens cDNA FLJ11980 fis, clone HE	1.98	3.11
	417553	L09190		trichohyalin	1.98	2.09
	449142	R15913	Hs.194987	ESTs	1.98	3.50
60	407597	AA043925	Hs.339352	Homo sapiens brother of GDO (BOC) mRNA,	1.98	6.25
	429299	AI620463	Hs.347408	hypothetical protein MGC13102	1.97	3.77
	423031	AI278995		ESTs	1.97	3.62
	433495	AW373784	Hs.71	alpha-2-glycoprotein 1, zinc	1.96	4.57
65	430420	AW140027	Hs.26373	Homo sapiens cDNA: FLJ23449 fis, clone H	1.96	6.09
	420139	NM_005357	Hs.95351	lipase, hormone-sensitive	1.95	5.77
	418462	BE001596	Hs.85266	integrin, beta 4	1.95	6.09
	447261	NM_006691	Hs.17917	extracellular link domain-containing 1	1.95	3.33
	437220	AL117542	Hs.334305	GS1999full	1.94	3.45
70	407601	AC002300	Hs.37129	sodium channel, nonvoltage-gated 1, beta	1.94	5.46
	443595	AF169312	Hs.9613	PPAR(gamma) angiopoietin related protein	1.94	4.67
	409007	AL122107	Hs.49599	Homo sapiens mRNA: cDNA DKFZp434G0827 (f	1.94	3.59
	408717	AF045458	Hs.47061	unc-51 (C. elegans)-like kinase 1	1.94	4.29
	420055	NM_001487	Hs.94672	GCH5 (general control of amino-acid synt	1.94	3.38
75	430392	NM_000627	Hs.241257	latent transforming growth factor beta b	1.93	3.75
	425078	NM_002599	Hs.154437	phosphodiesterase 2A, cGMP-stimulated	1.93	4.06
	423527	AI206965	Hs.105861	hypothetical protein FLJ13824	1.93	4.70
	447151	AJ022813	Hs.92679	Homo sapiens clone CDABP0014 mRNA sequen	1.91	3.77
	422101	AW404176	Hs.111611	ribosomal protein L27	1.91	3.18
80	456653	AJ807519	Hs.104520	Homo sapiens cDNA FLJ13694 fis, clone PL	1.91	3.41
	443444	AW952619	Hs.17235	Homo sapiens clone TCCCA00176 mRNA sequ	1.91	3.52
	420924	R01026	Hs.245321	ESTs	1.91	3.22
	426048	AJ768853	Hs.134478	ESTs	1.90	3.56
	414092	Z14244	Hs.75752	cytochrome c oxidase subunit VIIb	1.90	4.15

5	415274	AF001548	Hs.78344	myosin, heavy polypeptide 11, smooth mus	1.90	5.88
	428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin	1.90	2.28
	418418	R61527	Hs.237517	ESTs	1.90	3.56
	449372	AA001266	Hs.133521	ESTs	1.89	3.90
	438752	AW238873	Hs.146038	ESTs	1.89	5.24
	428193	NM_004235		Kruppel-like factor 4 (gu)	1.89	5.21
	433251	AB040955	Hs.322735	KIAA1522 protein	1.89	5.00
	430560	Z28942	Hs.243960	N-myc downstream-regulated gene 2	1.89	7.09
10	427795	BE268268	Hs.180842	ribosomal protein L13	1.89	4.51
	410209	AI583661	Hs.60548	hypothetical protein PRO1635	1.89	3.35
	449243	AW295031	Hs.198671	ESTs	1.89	4.26
	420225	AW243046	Hs.282076	Homo sapiens mRNA for KIAA1650 protein,	1.88	6.20
	443932	AW888222	Hs.9973	tensin	1.88	9.28
15	427929	BE613835	Hs.181159	Homo sapiens mRNA; cDNA DKFZp434F0217 (I	1.87	4.25
	400078			Eos Control	1.87	6.73
	422639	AI929377	Hs.173724	creatine kinase, brain	1.87	5.51
	447374	AF263462	Hs.18376	KIAA1319 protein	1.87	3.42
	430346	AK000331	Hs.297641	KIAA0462 protein	1.87	4.15
20	428223	AA424313	Hs.98402	ESTs	1.87	3.70
	408792	L29433	Hs.47913	coagulation factor X	1.87	4.08
	433855	AA834082	Hs.307559	ESTs	1.87	4.16
	451583	AI653797	Hs.24133	ESTs	1.87	3.81
	426377	AK001921	Hs.169575	hypothetical protein MGC2550	1.86	5.55
25	431647	AL138578	Hs.266738	hypothetical protein dJ796H17.1	1.86	3.74
	422055	NM_014320	Hs.111029	putative hemo-binding protein	1.86	4.68
	425750	AL050276	Hs.42400	zinc finger protein 288	1.86	4.04
	422491	AA338548	Hs.117546	neuronal	1.86	4.37
	438942	AW875398	Hs.6451	PRO0659 protein	1.85	5.06
30	400198			Eos Control	1.85	5.22
	427136	AL117415	Hs.173716	a disintegrin and metalloproteinase doma	1.85	3.41
	427605	NM_000997	Hs.337445	ribosomal protein L37	1.85	4.73
	418253	AA215539	Hs.283643	Homo sapiens cDNA FLJ11606 fis, clone HE	1.84	5.94
	441912	AA971484	Hs.159938	ESTs	1.84	3.73
35	421632	AA825426	Hs.334689	ESTs, Weakly similar to ALU1_HUMAN ALU S	1.83	3.62
	440602	AI743491	Hs.292692	ESTs	1.83	2.39
	431882	NM_001426	Hs.271977	engrailed homolog 1	1.83	3.30
	420772	AW752656	Hs.222707	KIAA1718 protein	1.83	3.73
	429197	H24471	Hs.26930	ESTs, Weakly similar to T20272 hypothesi	1.82	3.41
40	450796	NM_001988	Hs.25482	envoplakin	1.82	7.73
	426928	AF037062	Hs.172914	retinol dehydrogenase 5 (11-cis and 9-ci	1.82	3.38
	415409	AW993701		NS1-associated protein 1	1.82	3.60
	401131			NM_001651:Homo sapiens aquaporin 5 (AOP	1.82	5.53
	421324	BE257515	Hs.103503	deoxyribonuclease I-like 2	1.81	5.53
45	400079			Eos Control	1.81	6.79
	430513	AJ012008	Hs.241586	G6C protein	1.81	7.49
	426508	W23184	Hs.170171	glutamate-ammonia ligase (glutamine synt	1.81	3.55
	425883	AL137708	Hs.161031	Homo sapiens mRNA; cDNA DKFZp434K0322 (I	1.80	5.43
	429191	AF065215	Hs.198161	phospholipase A2, group IVB (cytosolic)	1.79	5.90
50	432417	AL040360	Hs.162203	ESTs, Weakly similar to alternatively sp	1.79	3.63
	406467			Target Exon	1.79	4.16
	444135	AK000374	Hs.10346	hypothetical protein FLJ20154	1.79	3.32
	426402	BE387327	Hs.80475	polymerase (RNA) II (DNA directed) polyp	1.78	3.51
	412524	AA417813	Hs.44208	hypothetical protein FLJ23153	1.78	3.72
55	425880	X01630	Hs.160786	argininosuccinate synthetase	1.78	3.29
	400300	X03363		HER2 receptor tyrosine kinase (c-erb-b2,	1.78	3.44
	451304	M92642	Hs.26208	collagen, type XVI, alpha 1	1.78	3.57
	400082			Eos Control	1.78	3.82
60	446603	NM_014835	Hs.15519	oxysterol-binding protein-related protei	1.77	3.48
	425415	M13903	Hs.157091	involucrin	1.77	4.64
	400383			Eos Control	1.77	6.31
	427620	NM_003705	Hs.179866	solute carrier family 25 (mitochondrial	1.76	3.47
	446971	AI652143	Hs.288382	hypothetical protein FLJ13111	1.76	4.21
	429807	AK002138	Hs.306227	Homo sapiens cDNA FLJ11276 fis, clone PL	1.76	2.63
65	446560	AK001567	Hs.311002	Homo sapiens cDNA FLJ10705 fis, clone NT	1.76	3.82
	412824	AW958075	Hs.11261	small proline-rich protein 2A	1.76	4.31
	439927	AA854650	Hs.124597	ESTs	1.75	3.63
	410223	S73775	Hs.60708	calsequestrin 1 (fast-twitch, skeletal m	1.75	3.79
70	414500	W24087	Hs.76285	DKFZP564B167 protein	1.75	3.55
	448182	AF244137	Hs.20597	host cell factor homolog	1.75	3.40
	439651	AF088480	Hs.56255	ESTs	1.75	2.55
	430486	BE062109	Hs.241551	chloride channel, calcium activated, fam	1.75	3.54
	424389	AA339786		lymphocyte-specific protein 1	1.75	4.48
	450837	D58463	Hs.85969	hypothetical protein FLJ12270	1.74	3.40
75	425920	AL049977	Hs.162209	claudin 8	1.74	3.33
	435680	H50946	Hs.284183	Homo sapiens galectin-related inhibitor	1.74	3.47
	439639	AA370045	Hs.6607	AXIN1 up-regulated	1.73	5.22
	416950	AL049798	Hs.80552	dermatopontin	1.73	4.99
	400199			Eos Control	1.73	6.25
80	409737	AB011539	Hs.56186	EGF-like-domain, multiple 3	1.73	4.28
	424420	BE614743	Hs.146688	prostaglandin E synthase	1.72	3.42
	421545	AA292810	Hs.90034	hypothetical protein FLJ21916	1.72	2.12
	414323	NM_014759	Hs.334688	KIAA0273 gene product	1.71	4.82
	407228	M25079	Hs.155376	hemoglobin, beta	1.70	7.02

5	406643	N77976	Hs.347939	hemoglobin, alpha 2	1.70	3.60
	447299	AF043897	Hs.18075	chromosome 9 open reading frame 3	1.70	5.10
	439733	AL365412	Hs.107203	hypothetical protein from EUROMAGE 1759	1.69	2.92
	415512	Y16270	Hs.78482	paralemmin	1.69	4.92
	407100	R29657		gb:F1-1179D 22 week old human fetal five	1.69	3.96
	425503	W92517	Hs.158203	actin binding LIM protein 1	1.68	5.97
	433738	A1684802		ESTs	1.68	2.88
	406791	A1220684	Hs.347939	hemoglobin, alpha 2	1.68	3.44
10	428975	NM_004672	Hs.194694	mitogen-activated protein kinase kinase	1.68	2.74
	435661	AF220263	Hs.193920	MOST2 protein	1.67	3.56
	459317	BRCA1b		Eos Control	1.67	3.34
	426923	AF112977	Hs.172887	phytanoyl-CoA hydroxylase (Refsum disease)	1.67	4.53
	426682	AV660038	Hs.2056	UDP glycosyltransferase 1 family, polype	1.67	3.36
15	417029	AW952192	Hs.273385	guanine nucleotide binding protein (G pr	1.67	5.22
	437201	F29279	Hs.171625	hypothetical protein MGC14697	1.67	5.75
	454478	AW805749		superoxide dismutase 2, mitochondrial	1.67	4.55
	406710	A1708347	Hs.184014	ribosomal protein L31	1.66	3.80
	431593	NM_002108	Hs.276590	ESTs	1.66	2.45
	457820	AA341497	Hs.31408	RAR (RAS like GTPASE)	1.66	2.44
20	441899	A1372588	Hs.6022	TUGA protein	1.66	4.06
	414186	U33446	Hs.75799	protease, serine, 8 (protease)	1.65	6.52
	418116	AA252457	Hs.86543	ESTs, Moderately similar to T00256 hypot	1.65	3.44
	403105			Target Exon	1.64	4.12
25	450014	H41322	Hs.18441	ESTs	1.64	2.90
	436685	W26661	Hs.5288	Homo sapiens mRNA; cDNA DKFZp434M245 (tr	1.64	4.49
	401429			C14001067:g[4126465]dbj BAA36581.1  (AB	1.64	3.82
	420983	W95228	Hs.100764	cathepsin G	1.64	3.64
	433126	AB021262	Hs.99816	beta-catenin-interacting protein ICAT	1.63	3.29
30	428150	AW950547	Hs.70312	cytochrome c oxidase subunit VIIa polype	1.63	7.05
	412295	AW088826		poly(A)-binding protein, nuclear 1	1.63	4.01
	430831	AA703239	Hs.269804	ESTs, Weakly similar to ALU1_HUMAN ALU S	1.63	3.60
	429348	AJ242859	Hs.199731	Langerhans cell specific c-type lectin	1.62	2.64
	407082	Z47055		gb:Human partial cDNA sequence, farnesyl	1.62	2.13
35	452556	H78517	Hs.33905	ESTs	1.62	4.64
	415688	AA166963		gb:zo86d01.s1 Stratagene ovarian cancer	1.62	3.33
	446515	AL048875		hypothetical protein DKFZp566b133	1.62	3.66
	445919	T53519	Hs.334692	hypothetical protein MGC14141	1.62	5.65
	447330	BE279949	Hs.18141	ladinin 1	1.61	5.61
40	412374	X01388	Hs.73849	apolipoprotein C-III	1.61	5.18
	400229			NM_021724: Homo sapiens nuclear receptor	1.61	3.57
	414814	D14697	Hs.77393	farnesyl diphosphate synthase (farnesyl	1.61	2.08
	424397	A1950320		gb:wp08610.x1 NC1_CGAP_Kd12 Homo sapien	1.60	3.59
	451335	AB023192	Hs.26285	imidazole receptor candidate	1.60	5.54
45	426156	BE244537	Hs.167382	natriuretic peptide receptor A/guanylate	1.60	4.79
	456267	A1127958	Hs.83393	cystatin E/M	1.60	2.50
	436950	L05779	Hs.113	epoxide hydrolase 2, cytoplasmic	1.60	3.98
	421397	S67368	Hs.103998	gamma-aminobutyric acid (GABA) A recepto	1.60	3.28
	419092	J05581	Hs.89603	mucin 1, transmembrane	1.60	3.69
50	440160	BE560269	Hs.7010	NP0002 protein	1.59	2.49
	417481	AA203281	Hs.6191	ESTs	1.59	3.60
	406778	H06273	Hs.101651	Homo sapiens mRNA; cDNA DKFZp434C107 (tr	1.58	3.98
	402991			Target Exon	1.58	3.36
	425169	AW292500	Hs.128514	ESTs	1.58	4.00
55	446429	A1681807	Hs.201391	ESTs	1.58	3.20
	426445	AA378739	Hs.187711	ESTs	1.57	3.63
	425196	AL037915	Hs.155097	carbonic anhydrase II	1.57	3.44
	422581	NM_016339	Hs.118562	Link guanine nucleotide exchange factor	1.57	3.55
	440054	AW661947	Hs.6891	splicing factor, arginine/serine-rich 6	1.56	3.39
60	415988	BE407713	Hs.78943	bleomycin hydrolase	1.56	2.43
	441860	AW451330	Hs.348198	hypothetical protein FLJ20262	1.55	3.38
	428462	A1571486	Hs.30258	ESTs	1.55	3.65
	449518	BE395253	Hs.30861	ESTs	1.55	3.80
65	420075	AF142482	Hs.203846	TEA domain family member 3	1.55	3.81
	406799	AA908548		gb:rog83g12.s1 NC1_CGAP_Ov8 Homo sapiens	1.54	3.87
	450787	AB006190	Hs.25475	aquaporin 7	1.54	4.06
	419659	AB023206	Hs.92186	Leman coiled-coil protein	1.54	3.82
	408543	N78098	Hs.44289	ESTs	1.54	3.10
	410169	A1373741	Hs.59384	hypothetical protein MGC3047	1.54	4.73
70	426068	AF029778	Hs.166154	jagged 2	1.54	4.82
	432191	AA043193	Hs.273186	hypothetical protein, clone Telethon(lia	1.54	5.83
	415166	NM_003652	Hs.78068	carboxypeptidase Z	1.54	4.58
	410048	W76467	Hs.343874	proline oxidase homolog	1.54	4.66
	430502	A1123657	Hs.127264	ESTs, Weakly similar to JC5314 CDC28/kdc	1.53	3.41
75	433640	AW390125	Hs.240443	Homo sapiens cDNA: FLJ23538 fls, clone L	1.53	4.57
	413353	AW293542	Hs.75309	eukaryotic translation elongation factor	1.53	3.59
	431021	A1869664		thiosulfate sulfurtransferase (rhodanese	1.53	3.73
	431243	U46455	Hs.252189	syndecan 4 (amphiglycan, ryudocan)	1.52	6.09
80	433019	A1208513	Hs.279915	translocase of inner mitochondrial membr	1.52	4.49
	406801	AW242054	Hs.190813	ribosomal protein L9	1.51	5.56
	427461	AA531527	Hs.332040	hypothetical protein MGC13010	1.51	3.77
	432894	AW167668	Hs.279772	brain specific protein	1.51	6.72
	415550	L13720	Hs.78501	growth arrest-specific 6	1.50	4.02
	424707	BE061914	Hs.10844	Homo sapiens cDNA FLJ14476 fls, clone MA	1.49	4.21



5	445624	AW140103	Hs.78880	lrv8 (bacterial acetolactate synthase)-I	1.48	3.61
	445071	AI280246	Hs.149504	ESTs	1.48	3.39
	440763	AB028988	Hs.7407	KIAA1065 protein	1.48	4.03
	451988	AF263928	Hs.27410	papillomavirus regulatory factor PRF-1	1.47	3.58
	427841	AW883367		hypothetical protein MGCS306	1.47	3.61
	426335	AI054347	Hs.2017	ribosomal protein L38	1.47	3.76
	454098	W27953	Hs.292911	Plekophilin	1.46	2.95
	456766	R87310	Hs.7740	oxysterol binding protein-like 1	1.46	3.40
10	440526	AI832243		ESTs	1.46	3.38
	452586	AW958479	Hs.289043	spindlin	1.45	3.48
	433399	H46406	Hs.84700	similar to phosphatidylcholine transfer	1.45	3.44
	430238	N72519	Hs.238545	hydroxyacid oxidase 2 (long chain)	1.45	4.00
	425456	T70445	Hs.157850	ribosomal protein L9	1.45	4.79
	411085	AF022991	Hs.68398	period (Drosophila) homolog 1	1.45	4.43
15	433638	AW872507	Hs.3462	cytochrome c oxidase subunit VIc	1.44	3.89
	445156	N89367	Hs.12373	adenylate cyclase 6	1.44	3.60
	446576	AI659477		dystroglycan 1 (dystrophin-associated gl	1.44	3.07
	440433	AA252452	Hs.7187	hypothetical protein FLJ10707	1.43	3.67
20	434536	H14486	Hs.3903	Cdc42 effector protein 4; binder of Rho	1.42	3.35
	423513	AF035960	Hs.129719	transglutaminase 5	1.42	3.18
	418681	AA287786	Hs.23449	insulin receptor tyrosine kinase substra	1.42	3.38
	421935	AA131632	Hs.109672	CMP-NeuA C(beta)-N-acetylglucosaminide	1.41	4.04
	406712	M31212	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.41	4.27
25	413944	AW001579	Hs.9645	Homo sapiens mRNA for KIAA1741 protein,	1.41	3.80
	435879	AW084463	Hs.30002	SH3-containing protein SH3GLB2; KIAA1848	1.41	3.55
	417967	BE244373	Hs.1119	nuclear receptor subfamily 4, group A, m	1.40	4.07
	412669	AW880841	Hs.96908	p53-induced protein	1.40	3.59
	415523	AL042003	Hs.296847	cell matrix adhesion regulator	1.40	4.38
30	406713	U02629	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.39	4.03
	439606	W79123	Hs.58561	G protein-coupled receptor 87	1.39	3.65
	430135	NM_000035	Hs.234232	aldolase B, fructose-bisphosphate	1.37	3.99
	422682	W05238	Hs.94316	ESTs, Weakly similar to T31613 hypotheti	1.36	3.30
	408198	AA131111		gb:zo16b06.r1 Stratagene colon (937204)	1.36	3.33
35	419600	AA448958	Hs.91481	NEU1 protein	1.35	3.49
	437141	BE304917	Hs.31097	hypothetical protein FLJ21478	1.34	3.47
	408250	R92918	Hs.19597	KIAA1694 protein	1.34	3.89
	430012	NM_015373	Hs.227637	chromosome 22 open reading frame 2	1.32	4.24
	425183	W76098	Hs.19223	HCCA2 protein	1.32	3.52
40	427706	AW971225	Hs.293800	ESTs, Weakly similar to ALU1_HUMAN ALU S	1.32	3.50
	438303	AB028998	Hs.6147	KIAA1075 protein	1.32	3.71
	406800	AA505535		gb:n84h10.s1 NCL CGAP_Br1.1 Homo sapien	1.32	3.65
	425333	AA161224	Hs.8372	ubiquinol-cytochrome c reductase (5.4kD)	1.32	4.14
	428475	AF172940	Hs.184542	CGI-127 protein	1.31	3.43
45	406742	AI468091	Hs.279880	tumor protein, translationally-controlle	1.30	3.34
	432295	BE091049	Hs.343665	ribosomal protein S15a	1.30	3.29
	422959	AV647015		paired immunoglobulin-like receptor beta	1.28	3.53
	402956			ENSP00000244002; KIAA1335 protein (Fragm	1.24	3.38
	406743	AA911568	Hs.279860	tumor protein, translationally-controlle	1.24	3.70
50	437142	AI791617	Hs.145068	ESTs, Moderately similar to A46010 X-in	1.23	3.48
	424372	AW952803	Hs.21732	Homo sapiens cDNA FLJ111780 fis, clone HE	1.18	2.44
	414716	AF199598	Hs.97044	Kv channel-interacting protein 2	1.18	3.43
	431931	AB035302	Hs.272212	cadherin 9, type 2 (T1-cadherin)	1.15	2.49
	406587			C15000544; gq15454148ref[NP_006368.1] U	1.06	2.25
55	409574	AW419080	Hs.250645	ESTs	1.00	3.60
	417435	NM_005181	Hs.82129	carbonic anhydrase III, muscle specific	1.00	3.44
	402075			ENSP00000251056; Plasma membrane calcium	1.00	3.37
	422330	D30783	Hs.115263	epiregulin	1.00	3.35
	418986	AI123555	Hs.81796	ESTs	1.00	3.28
	404175			Target Exon	1.00	3.08
60	452640	AA027115	Hs.100206	ESTs, Weakly similar to A53856 aryl-acyl	1.00	2.82
	443564	AI921685	Hs.199713	ESTs	1.00	2.51

TABLE 64B:

Pkey:	Unique Eos probeset identifier number
CAT number:	Gene cluster number
Accession:	Genbank accession numbers

65	Pkey	CAT Number	Accession
	412636	1438_1	M77830 NM_004415 AF139065 BG681115 BG740377 B1712964 BG000656 AA128470 BI438324 H27408 BE931630 BE167165 AW370827 AW370813 J05211 BG698865 BG740734 BG680616 BG739778 B1755807 BM353403 BM353248 AW177784 AW205789 AW951576 AW848592 BE182164 BF149266 BE940187 BI060445 BI060444 BF350983 BE720095 BE720069 BE715154 BE082584 BE082576 BE004047 AA857316 BI039774 BE713818 BE713548 AW170253 BE160433 BI039775 AW886475 BM462504 BE931734 BF149264 AA340777 BF381183 BG621737 AU127260 AW364859 BF993352 BG223489 BE819009 BF381184 BE715956 R58704 AA852212 AW366566 BI090358 BF087707 BE819046 BE819005 AA377127 BE073467 BE819069 BE819048 BI036306 BG990973 BI040954 BF919911 AU140155 AI951766 AI434518 AW804674 BF752969 BE837009 BE925826 BF149265 AW995615 BE814264 BI039782 AU140407 BE144243 BE709863 BF985642 BE001923 BF933510 AW265328 BG436319 BE182166 AW365175 AW847688 BE818280 AW177933 BF873679 AW178000 BE082526 BF476866 BF086994 BF592276 BE082507 BE082514 BE082505 BF873693 AW068840 AW847678 BF804153 AW365157 BE813930 BE002030 AW365153 BE184941 BF749421 BE184920 BF839562 BE184933 BF842254 BE698470 BE931048 BF998889 BF368816 BE184924 BE159646 BE714632 BE184948 BG986845 AA131128 AA099891 W39488 C04715 BF096124 BE865341 AW799304 AL603116 BE149760 BE705967 BE705966 BE705968 AW848723 AW376699 AW376817 AW376697 BG005097 BF751115 BE696084 AW848371 AW376782 AW848789 AW849074 AW361413 BF927725 BF094211 AW997139 BE865474 BE185187 BE156621 BE715089 BE713297 BE713298 BE179915 AW799309 BF872345 BF088676 BE705939 AW752599 BG005197 BF350086 BE715196 BE715155 BF752396 BF093817 BF831190 BF752409 BE005551 BG959922 BF094833 BF094748 BF094583 AW377699 AW607238 BE082519 AW377700 BF349467 AI190590 AI554403 AI392926 AU158477 BI467252 AU159919 AIT60816 BF082516 AA439101 AA451923 AI340326 AI590975 BI791553 AI700963

5		407328	534268_1
10		427890	1373988_1
15		440116	454673_1
20		444105	649788_1
25		431926	1237041_1
30		424399	2196_1
35		426101	3211_1
40		438962	195763_1
45		445493	423456_1
50		407102	7177_2
55		421998	133592_1
60		408239	103120_1
65		437611	240435_1
70		456332	21353_10
75		458222	631332_1
80		434206	185910_1
		417054	12405_2
		423974	888155_1
		412668	33230_1
		444726	3503_2
		451184	1531_4
		443072	449629_1
		437596	2875_1
		411962	2307710_1
		440469	1030831_1
		450860	40397_1
		418481	17381_1

			BE061934 H01096 R696 13 A1383162 AU133723 AA311526 R67942 H01097 H72113 R72430 R39494 AV744074 AA535925 B1759288 B1052385 BF854687 AW608286 AAD43438 R72478 AL513811 R69214 AA189435 AA054965 AI220117 A1857837 A1218371 BM091400 A1304964 A1198508 A1400738 AW571549 AW950042 A1089943 AA437280 AU150878 BF197070 A1267984 BF594181 BF196688 A1433152 A1338921 A1620364 A1280197 AA652531 A1574938 A1342447 A1620350 A1281295 A1148621 H54787 A1338121 A1281153 N51899 A1087072 AA954788 AW069054 A1346309 BG529629 A1340135 BF083036 A1167365 AW819657 AA935468 A167868 AW148701 A1383720 BE047685 AW015498 AA937149 AA708346 AW771478 AW802508 H53334 AW389204 AW798230 A1553922 A1560688 AW950043 A1961682 AV706506 R01853 AA126514 N62757 A1536893 A1926052 A1418720 N99964 A1568933 A1915737 A080691 A1185358 N48996 N68575 H82824 H60037 A1247247 T95664 BF593863 A1749637 AW088541 AA991294 AA887452 A1073726 AA633132 AA629674 AA629649 AA629656 AA578595 A1168758 AA804572 A1085786 AA943936 AA991209 AA948663 AA929054 AA927952 T87001 AA928210 AA629296 AW802267 AW384129 BF744400 AA194110 A1382839 AA194837 AA406284 A1250750 R37035 A1525586 W01244 AA122277 BE183957 BE183956 AF150424 A1861896 AA570057 AV738855 AF119900 NM_018539 AA702388 N53043 BF351064 N70103 A1207469 AA551569 AW383189 W00906 W00935 N54252 BG567713 AW665841 A1814924 AW978339 AW264036 A1373950 AW183157 AW082249 A1201658 A1364196 AA150743 AA160873 AA453757 BF871648 BF871640 AA565311 AA989511 R10152 AA807154 T77900 AV751591 BC021735 A1669212 AL120184 A1769949 BE701002 BE184363 BE819031 BG702238 BF090049 BF963318 BF961912 BF943013 AA934514 AA151245 BF960659 AA987907 Z41449 BF908059 BF908053 BF908049 BE699424 BF908060 BF962832 BF952020 BF963134 B1035638 BF908052 BF908057 BF090026 BF943158 A1632924 BF512340 BF952021 BF960776 BF943437 BF942847 A1768015 F09778 F04816 F02721 AA102645 A1633838 AA617929 BF947001 B1035448 BE935876 AW990837 AW989604 BF957405 BF963433 BG704815 AA662701 AA633929 AA737415 BE065904 AW749036 BE175748 BE175747 BE175745 T64217 BE394588 AW024754 BE183167 BE183166 BE378353 AA633408 AW749955 AW629759 A1651005 AK057547 BG181248 AA863756 F25670 AA778128 F27657 F18914 F25171 AA178844 F21556 F25872 F20457 F27617 F36059 F34817 F26967 F25922 F31278 F34666 F01176 F36333 F01226 F27406 F27130 F28742 F24126 F29891 AA195955 AA086351 W69291 F25880 F32791 F31311 F32380 F25216 F19679 F18656 F29700 F24954 F32741 F30404 F35470 F33989 F33141 F36382 F34118 F17714 AA176345 F24700 AA550940 F18617 F16859 F15633 F34675 F16528 F17281 AAD86388 F30859 F21852 C02644 F29425 F25286 C03553 F35259 W00691 F16457 F24094 F16783 AA180319 F28443 F17763 F17448 F00542 AA197179 AA193012 BG566720 AA10276 W92098 BE837833 BF541660 AW889587 A1651246 A1339033 A1078183 A1686504 AA813616 BF056955 A13664 BF509917 AW663717 W95054 A1382907 A1399929 F10511 AA427819 AW269408 BE825398 BG654856 AA037082 A1203007 AW953522 H65211 AA010218 A1355222 BF378422 AA366587 BF874552 AW277084 R26970 D79194 R27662 AW972670 AA525808 H28359 H28383 AA293303 AA492458 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424389	1059_4	BG190758 AW961118 W77994 AA339877 AW845121 AW845129 BG181820 BE716719 AI125483 AI161017 W73951 AJ250771 AA912611 AA339786		
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454478	4273_16	AL037666 AW607643 AJ280025 AL037665 AW291619 AJ280142 AA765506 AI684802 AW085941 AI688062		
412295	133592_1	AW796921 AW798102 AW805749 AW805872 BF985060 AW794380 BF380449 AW794466 AW794538		
		B175723 BG911321 BF351759 AW244016 AW026834 AW024260 AI420138 AA779354 AI093360 AI934858 AW151292 AJ373133 AI335587 AI969728		
		AA101632 BE218525 AJ802114 AJ783721 AA845265 AW088826 AI832852 F03967 AI611148 AJ720358 AW293764 N91161 R79192 W85852		
		AW771263 BG820263 BG012864 R74441 R86080 WQ4256 BE707244 BF899452 BE327552 BE669500 AI492388 AJ241532 BF448184 AI209012		
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		AW303990 AI685291 AI076127 AW470084 AI022394 AI298624 AA253418 W79538 AA719820 AA253398 AI400823 AW294450 AI022396 AA907775		
		BF445607 AA698324 AA025643 AW573103 AI167444 AA580002 AW103144 AI640654 AA857115 AA923021 AI066439 AI358865 AA843287 AI824604		
15		AA732370 AW002202 AI219540 AA621697 AI950639 AA904277 AI867527 BF437695 AA808593 AI784144 AI648539 AV752557 AV752603 AA025642		
		AA764744 AW149075 N30700 H92303 W79523 AI762795 AA282784 H78923 AA252879 H98107 F23754 AA005152 N99239 N74632 H80133 H24710		
		R38907 R66368 R42466 R52648 H11010 R98493		
	400229 462_3	NM_021724 M24898 X72631 BE550221 BF436030 F18898 AL567477 BG033127 BG747927 BF823716 AA371902 AL137978 AL577786 BI490529		
		AA021622 AA151679 AA745053 AA454168 R85506 AA016015		
20	424397 893246_1	AI905320 AA340023		
	406799 0_0	AA908548		
	431021 10409_1	NM_003312 BC010148 AK000862 D87292 BG709214 BF972766 BG740474 BI771592 BI159859 BI820468 BI523933 AI869664 AA314620 BF724353		
25		BG194276 BG195282 BI524679 BF435589 AI300546 AA481682 AW780207 AI800832 AI380540 BE222877 AW300707 AA481445 AW015893 AI381541		
		AW768558 AI138798 AA432063 AA948713 AI869485 AI307419 AI336589 AI301672 BF055581 AI312785 AI521208 AJ297918 AI989759 M78015		
		BF178621 AI927654 AI795909 AI335381 BF334524 AW007444 AA706797 AA975178 AA884739 AA443837 AA933897 AI826464 AI271737 AA053419		
		H79704 AI984483 BG952614 BF345358 AW083336 AA643660 AI478232 AA603071 BE714413 AW078660 AW070418 R02364 BG925951 AI568823		
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	446576 629517_1	AA132859 AA131111 AA053057		
	408198 102854_1	AA505535		
	406800 0_0	AJ400845 AI954159 AL041618 AI028269 AA769325 AW780241 AW129462 AJ271476 BF798303 AA836991 AW273346 AI436321 AI375545 AL040967		
	422959 MH905_3	AA889495 AI922524 AA598667 AA423804 AL040910 N80292 AI954063 AI923968 AI400578 AA748499 BE677845 AW020788 AA860230 AWS19209		
35		AA767391 AI860419 AA476935 AW452389 AJ017695 AA806940 BI497005 AI051533 AI650706 AI811516 AA609569 AI439198 BF430946 AA749268		
		AI624860 AI784422 BI491753 AI206880 BE671796 AI431957 AI187038 AI678429 AJ273421 AA897667 AA586499 BE241923 AF161081 NM_013440		
		BE073169 AI700673 AV699081 AV684786 AV688081 AV689220 AV689216 AA132636 BF086186 BF917106 AV762653 BI064033 BE168145 AA778650		
		AI984255 W69468 AA132452 N53156 AI949278 AW168519 F26886 AA908333 F37181 BI002729		
40	TABLE 64C:			
	Pkey:	Unique number corresponding to an Eos probeset		
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA		
		sequence of human chromosome 22" Dunham, et al. (1999) <i>Nature</i> 402:489-495.		
	Strand:	Indicates DNA strand from which exons were predicted.		
45	NL_position:	Indicates nucleotide positions of predicted exons.		
	Pkey	Ref	Strand	NL_position
	401781	7249190	Minus	83215-83435,83531-83656,83740-83901,8423
	401780	7249190	Minus	28397-28617,28920-29045,29135-29296,2941
50	401203	9743387	Minus	172961-173056,173868-173928
	401785	7249190	Minus	165776-165996,166189-166314,166408-16656
	402294	2282012	Minus	2575-3000
	402845	9369286	Plus	160451-160617,160788-161009
	403710	6437516	Plus	27413-28978
55	401760	9929699	Plus	83126-83250,85320-85540,94719-95287
	403593	6862650	Minus	62554-62712,69449-69602
	400494	9714719	Plus	169845-170272
	400835	8954121	Plus	89366-89622
	401905	8671966	Plus	153965-154441,156599-156819
60	403180	7523976	Minus	63603-63759
	401747	9789672	Minus	118596-118816,119119-119244,119609-11976
	403108	8980955	Plus	93253-93667
	404996	6007890	Plus	37999-38145,38652-38998,39727-39872,4055
	402575	9884830	Minus	109742-109883
65	402338	6957691	Minus	36915-37250
	401205	9743388	Plus	167373-167433,167936-168031
	401192	9719502	Minus	69559-70101
	406400	9256298	Plus	1553-1712,1878-2140,4252-4385,5922-6077
	404246	7406725	Plus	82477-82628,82721-82817,82910-83071,8314
70	401131	8699812	Minus	94802-94987,95804-95887,96323-96487,9759
	406467	9795551	Plus	182212-182958
	403105	8980016	Minus	145287-145744
	401429	8217890	Minus	86946-87579
	402991	7631064	Minus	161294-161579
75	402958	9408727	Minus	135901-136035
	406587	8189273	Minus	120577-120718
	402075	8117407	Plus	121907-122035,122804-122921,124019-12416
	404175	9931117	Minus	107420-107547,109625-109796
80				

TABLE 65A: ABOUT 838 GENES DOWNREGULATED IN BENIGN NEVI RELATIVE TO NORMAL SKIN

Table 65A lists about 838 genes downregulated in benign nevi relative to normal skin. Genes were selected from 59680 probesets on the Eos/Affymetrix Hu03 Genechip array. Gene expression data for each probeset obtained from this analysis was expressed as average intensity (AI), a normalized value reflecting the relative level of mRNA expression.

Pkey: Unique Eos probe/seq identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigeneID: Unigene number  
 Unigene Title: Unigene gene title  
 5 R1: 90th percentile of normal skin AIs divided by the average of benign nevi AIs  
 R2: 90th percentile of normal skin AIs divided by the average of benign nevi AIs, where the 15th percentile of normal tissue AIs was subtracted from both the numerator and denominator

	Pkey	ExAccn	UnigeneID	Unigene Title	R1	R2
10	420813	X51501	Hs.99949	prolactin-induced protein	27.72	28.59
	408591	AF015224	Hs.46452	mammaglobin 1	26.40	28.34
	422166	W72424	Hs.112405	S100 calcium-binding protein A9 (calgran	21.33	21.57
	418026	BE379727	Hs.83213	fatty acid binding protein 4, adipocyte	18.06	18.96
	429441	AJ224172	Hs.204096	lipoprotein B (uteroglobulin family member)	16.61	18.06
15	428087	AA100573	Hs.182421	troponin C2, fast	14.70	14.60
	407245	X90568	Hs.172004	titin	13.08	13.84
	428824	W23624	Hs.173059	ESTs	12.89	13.36
	428330	L27524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	12.78	13.98
	444816	Z48633	Hs.283742	Hsapiens mRNA for retrotransposon	12.26	9.85
20	453309	AI791809	Hs.32949	defensin, beta 1	12.02	10.62
	423024	AA593731	Hs.325823	ESTs, Moderately similar to ALU5_HUMAN A	11.90	10.86
	446227	AI281459	Hs.270114	ESTs	11.79	12.32
	413902	AU076743	Hs.75613	CD36 antigen (collagen type I receptor,	11.19	10.82
	432877	AW974111	Hs.292477	ESTs	11.18	11.30
25	426752	X69490	Hs.172004	titin	10.97	12.63
	427899	AA829286	Hs.332053	serum amyloid A1	10.85	13.85
	407230	AA157857	Hs.182265	keratin 19	10.79	11.40
	451029	AA852097	Hs.25829	ras-related protein	10.78	10.35
	421296	NM_002666	Hs.103253	perlepin	10.73	11.25
30	431211	M86849	Hs.323730	gap junction protein, beta 2, 26kD (conn	10.66	7.24
	422633	X56832	Hs.118804	enolase 3, (beta, muscle)	10.57	9.92
	405121			mitogen-activated protein kinase 8 inter	10.41	10.54
	450912	AW939251	Hs.25647	v-fos FBJ murine osteosarcoma viral onco	10.26	23.20
	420859	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	10.25	9.45
35	410850	AW362867	Hs.302738	Homo sapiens cDNA: FLJ21425 fis, clone C	10.15	9.88
	416931	D45371	Hs.80485	adipose most abundant gene transcript 1	10.13	11.58
	447966	AA340605	Hs.105887	ESTs, Weakly similar to Homolog of rat Z	10.09	5.51
	401203			Target Exon	9.95	10.74
	425545	N98529	Hs.158295	Homo sapiens, clone MGC:12401, mRNA, com	9.94	11.47
40	425580	L11144	Hs.1907	galanin	9.66	6.60
	414092	Z14244	Hs.75752	cytochrome c oxidase subunit VIIb	9.45	6.44
	420919	M57892	Hs.100322	carbonic anhydrase VI	9.41	10.49
	443162	T49951	Hs.9029	DKFZP434G032 protein	9.36	10.58
	430154	AW583058	Hs.234726	serine (or cysteine) proteinase inhibitor	8.91	10.27
45	452322	BE566343	Hs.28988	glutaredoxin (thioltransferase)	8.90	7.26
	430071	AA355986	Hs.232068	transcription factor 8 (represses interl	8.86	8.94
	417240	N57568	Hs.48028	EST	8.81	18.90
	415477	NM_002228	Hs.78465	v-jun avian sarcoma virus 17 oncogene ho	8.72	6.86
50	430130	AL137311	Hs.234074	Homo sapiens mRNA; cDNA DKFZp761G02121 (	8.39	10.26
	408491	AI088063	Hs.7882	ESTs	8.00	8.20
	414657	AA424074	Hs.76780	protein phosphatase 1, regulatory (inhib	7.99	8.14
	409738	BE222975	Hs.56205	insulin induced gene 1	7.95	7.75
	428221	U96781	Hs.183075	ATPase, Ca transporting, cardiac muscle,	7.89	8.86
55	451831	NM_001674	Hs.460	activating transcription factor 3	7.79	7.51
	410867	X63556	Hs.750	fibrillin 1 (Marfan syndrome)	7.76	7.55
	444984	H15474	Hs.132898	fatty acid desaturase 1	7.75	5.64
	413076	U10564	Hs.75188	wee1 (S. pombe) homolog	7.68	5.65
	410532	T53088	Hs.155376	hemoglobin, beta	7.64	4.73
	442757	AI739528	Hs.28345	ESTs	7.62	7.66
60	412047	AA934589	Hs.49696	ESTs	7.61	7.48
	410052	AA525225	Hs.334630	Homo sapiens cDNA FLJ14462 fis, clone MA	7.52	7.28
	439394	AA149250	Hs.56105	ESTs	7.52	6.72
	442941	AU076728	Hs.8867	cysteine-rich, angiogenic inducer, 61	7.51	6.27
	450680	AF131784	Hs.25318	Homo sapiens clone 25194 mRNA sequence	7.51	4.10
65	456525	AW468397	Hs.100000	S100 calcium-binding protein A8 (calgran	7.49	8.08
	407334	AA944111	Hs.296031	ESTs	7.48	6.78
	414449	AA557660	Hs.76152	decorin	7.39	8.30
	432305	M62402	Hs.274313	insulin-like growth factor binding prote	7.38	8.79
70	407328	AA508857	Hs.271473	ESTs, Weakly similar to ALU1_HUMAN ALU S	7.35	7.20
	431842	NM_005764	Hs.4	epithelial protein up-regulated in cardi	7.06	6.93
	426488	X03350	Hs.4	alcohol dehydrogenase 1B (class I), beta	7.03	7.85
	445502	AW379160	Hs.12813	DKFZP434J214 protein	7.01	6.63
	419285	D31887	Hs.89868	KIAA0062 protein	7.01	5.82
	409024	AW883529	Hs.173830	ESTs, Weakly similar to ALU7_HUMAN ALU S	6.99	4.58
75	422963	M79141	Hs.13234	ESTs	6.99	4.08
	447918	AI129320	Hs.115175	ESTs, Highly similar to JCS818 gamma-act	6.98	6.49
	410530	M25809	Hs.64173	ATPase, H transporting, lysosomal (vacuo	6.96	7.04
	444381	BE387335	Hs.283713	ESTs, Weakly similar to S64054 hypothe	6.95	8.08
	417993	AW963705	Hs.301183	molecule possessing ankyrin repeats indu	6.94	7.12
80	443060	D78874	Hs.8944	procollagen C-endopeptidase enhancer 2	6.94	6.79
	427890	AA435761		ESTs	6.94	6.68
	444207	AI565004		cathepsin D (lysosomal aspartyl protease	6.93	4.66
	442083	RS0192	Hs.165062	ESTs	6.92	6.92

5	441633	AW958544	Hs.112242	normal mucosa of esophagus specific 1	6.87	5.07
	407722	BE252241	Hs.38041	pyridoxal (pyridoxine, vitamin B6) kinas	6.87	4.99
	444051	H48373	Hs.10247	activated leucocyte cell adhesion molecu	6.84	5.33
	414841	H55601	Hs.77490	glutathione S-transferase theta 1	6.84	3.47
	430314	AA369601	Hs.239138	pre-B-cell colony-enhancing factor	6.79	7.14
	427704	AW971063	Hs.292882	ESTs	6.72	7.30
	431713	AK000388	Hs.267997	EHM2 gene	6.72	7.10
	451253	H48299	Hs.26126	claudin 10	6.71	7.20
10	453187	AI161383	Hs.34549	ESTs, Highly similar to S94541 1 clone 4	6.68	3.02
	400304	AF005082	Hs.113261	Homo sapiens skin-specific protein (xp33	6.64	6.08
	434625	W01370	Hs.46824	ESTs	6.61	6.92
	408063	BE086548	Hs.42346	calcineurin-binding protein calsarcin-1	6.60	7.29
	425280	U31519	Hs.1872	phosphoenolpyruvate carboxykinase 1 (sol	6.55	6.79
	411388	X72925	Hs.69752	desmocollin 1	6.55	3.44
15	413731	BE243845	Hs.75511	connective tissue growth factor	6.52	4.86
	455863	AA907305	Hs.36475	ESTs	6.50	4.24
	412247	AF022375	Hs.73793	vascular endothelial growth factor	6.49	4.56
	407102	AA007629		glycerol-3-phosphate dehydrogenase 1 (so	6.47	7.23
20	421407	T82331	Hs.182278	ESTs, Weakly similar to CGHUSC collagen	6.47	6.55
	408867	AA157857	Hs.182265	keratin 19	6.44	6.23
	429504	X99133	Hs.204238	lipocatin 2 (oncogene 24p3) (NGAL)	6.43	6.79
	446945	AI193115	Hs.16611	tumor protein D52-like 1	6.43	5.66
	413172	M38180	Hs.38586	hydroxy-delta-5-steroid dehydrogenase, 3	6.39	7.09
25	407395	AF005082		gb:Homo sapiens skin-specific protein (x	6.39	4.76
	450626	AW190889	Hs.1508	insulin-degrading enzyme	6.37	6.22
	450713	AL133611	Hs.25362	Homo sapiens mRNA; cDNA DKFZp434O1317 (f	6.37	4.91
	437596	AA761490		ESTs, Moderately similar to S65657 alpha	6.35	5.31
	430191	AI149880	Hs.188809	ESTs	6.34	6.15
30	433713	AW976511	Hs.112592	ESTs	6.34	5.67
	420107	AL043980	Hs.7886	pellino (Drosophila) homolog 1	6.33	6.39
	422069	AJ010063	Hs.343603	titin-cap (telethonin)	6.33	5.77
	437176	AW176909	Hs.42346	calcineurin-binding protein calsarcin-1	6.30	5.45
	433412	AV653729	Hs.6185	CGI-44 protein; sulfide dehydrogenase fi	6.29	6.68
35	447335	BE617695	Hs.286192	hypothetical protein FLJ20940	6.28	10.35
	413063	AL035737	Hs.75184	chitinase 3-like 1 (cartilage glycoprote	6.21	5.98
	440116	AI798851		hemoglobin, gamma G	6.18	6.86
	454229	AW957744	Hs.278469	lacrimal proline rich protein	6.17	6.54
	441188	AW292830	Hs.255609	ESTs	6.12	6.68
40	451144	AW956103	Hs.61712	pyruvate dehydrogenase kinase, isoenzyme	6.12	5.79
	431319	AA873350	Hs.302232	ESTs	6.11	7.91
	442498	U54617	Hs.8364	Homo sapiens pyruvate dehydrogenase kina	6.10	5.63
	414555	N88569	Hs.76422	phospholipase A2, group IIA (platelets,	6.08	6.96
	418321	D63477	Hs.84087	KIAA0143 protein	6.08	4.71
45	443072	AI937532		gb:wp78d02.x1 NCL_CGAP_Bm25 Homo sapien	6.07	5.48
	423712	W46802	Hs.81988	disabled (Drosophila) homolog 2 (mitogen	6.04	5.81
	442679	R53718		hypothetical protein FLJ10659	6.03	5.67
	424824	AI217440	Hs.143873	ESTs	6.02	5.46
	413719	BE439580	Hs.75498	small inducible cytokine subfamily A (Cy	6.01	7.05
50	428358	AA993222	Hs.101915	Stargardt disease 3 (autosomal dominant)	5.94	7.17
	430821	AA487264	Hs.154974	Homo sapiens mRNA; cDNA DKFZp667N064 (fr	5.92	5.79
	424670	W61215	Hs.116651	epithelial V-like antigen 1	5.92	5.63
	424673	AA345051	Hs.294092	ESTs, Weakly similar to I38022 hypothesi	5.91	6.81
	418205	L21715	Hs.83760	troponin I, skeletal, fast	5.91	6.95
55	400440	X83957	Hs.83870	nebulin	5.89	7.01
	444239	R57988	Hs.10706	epithelial protein lost in neoplasm beta	5.89	5.49
	419517	AF052107	Hs.90797	Homo sapiens clone 23620 mRNA sequence	5.86	5.88
	432626	AA471098	Hs.278544	acetyl-Coenzyme A acetyltransferase 2 (a	5.86	5.58
	407584	W25945	Hs.8173	hypothetical protein FLJ10803	5.81	5.09
60	449335	AW150717	Hs.345728	STAT induced STAT inhibitor 3	5.79	6.33
	445607	AA488107	Hs.30156	ESTs, Weakly similar to unnamed protein	5.78	5.91
	424571	BE379766		polymerase (RNA) II (DNA directed) polyp	5.78	3.74
	412630	AA738437	Hs.26226	Homo sapiens cDNA: FLJ21286 fs, clone C	5.76	4.21
	408819	AW163483	Hs.48320	double ring-finger protein, Doriin	5.71	4.59
65	433027	AF191018	Hs.279923	putative nucleotide binding protein, est	5.70	4.71
	406704	M21665	Hs.929	myosin, heavy polypeptide 7, cardiac mus	5.68	6.12
	408515	AI289507	Hs.299883	hypothetical protein FLJ23399	5.67	4.81
	443827	AI087867	Hs.134667	ESTs	5.67	5.54
	429693	BE254962	Hs.211612	SEC24 (S. cerevisiae) related gene fami	5.67	4.12
70	427373	AB007972	Hs.130760	myosin phosphatase, target subunit 2	5.66	4.27
	428666	AL080190	Hs.189242	Homo sapiens mRNA; cDNA DKFZp434A202 (fr	5.65	5.16
	421834	BE543205	Hs.288771	DKFZP586A0522 protein	5.65	4.52
	427081	AI474533	Hs.170528	ESTs, Moderately similar to ALUC_HUMAN !	5.65	4.81
	419731	S47242	Hs.92909	SON DNA binding protein	5.64	3.77
75	420787	AA564248		ESTs, Weakly similar to I38022 hypothesi	5.64	3.27
	420682	AI380552	Hs.88602	ESTs	5.63	4.13
	410541	AA065003	Hs.64179	synenin-2 protein	5.62	5.84
	431360	NM_000427	Hs.251680	loricin	5.61	5.14
	418127	BE243982	Hs.83532	membrane cofactor protein (CD46, trophob	5.61	4.28
80	430332	R51790	Hs.239483	Human clone 23933 mRNA sequence	5.60	5.76
	427850	AA416756	Hs.161051	ESTs, Moderately similar to ALU6_HUMAN A	5.51	16.04
	429679	NM_006290	Hs.211600	tumor necrosis factor, alpha-induced pro	5.49	5.28
	422082	AA016188	Hs.111244	hypothetical protein	5.49	5.23
	419461	AI452601	Hs.288869	nuclear receptor subfamily 2, group F, m	5.49	4.40

	430714	AA484757	Hs.287601	Homo sapiens cDNA FLJ13830 fis, clone TH	5.48	5.38
	407744	AB020629	Hs.38095	ATP-binding cassette, sub-family A (ABC1	5.46	5.11
	400494			ENSP00000238970:CG30 (Fragment).	5.45	3.63
	415062	H4S100	Hs.49753	uvetral autoantigen with coiled coil domai	5.43	4.25
5	449291	BE176893	Hs.23440	KIAA1105 protein	5.41	3.82
	435538	AB011540	Hs.4930	low density lipoprotein receptor-related	5.41	2.62
	417035	AA192455	Hs.22968	Homo sapiens clone IMAGE:451939, mRNA se	5.40	5.40
	434535	AI611729	Hs.167619	ESTs, Moderately similar to ALUC_HUMAN I	5.40	5.20
	408085	N25929	Hs.342849	ADP-ribosylation factor-like 5	5.39	4.59
10	413778	AA090235	Hs.75535	myosin, light polypeptide 2, regulatory,	5.37	14.96
	436090	AI640635	Hs.332879	EST	5.37	5.33
	406805	AI686003	Hs.296031	ESTs	5.35	5.49
	426510	AW861225	Hs.251928	BANP homolog, SMAR1 homolog	5.35	6.83
	406706	X03740	Hs.231581	myosin, heavy polypeptide 1, skeletal mu	5.34	7.50
15	456332	AA228357		gb:nc39d05.r1 NCL_CGAP_Pr2 Homo sapiens	5.34	4.88
	421999	U50535	Hs.110630	Human BRCA2 region, mRNA sequence CG006	5.34	4.75
	418479	AA829976		mannosidase, alpha, class 1A, member 2	5.34	3.59
	417059	AL037672	Hs.81071	extracellular matrix protein 1	5.34	4.71
	424008	R02740	Hs.137555	putative chemokine receptor, GTP-binding	5.34	4.7
20	415694	AW194301	Hs.339283	Human DNA sequence from clone RPI-187J11	5.34	8.69
	452747	BE153855	Hs.61460	Ig superfamily receptor UNIR	5.31	5.81
	449271	AW338067	Hs.7869	Homo sapiens cDNA FLJ11946 fis, clone HE	5.30	4.35
	437135	AL038624	Hs.208752	ESTs, Weakly similar to ALU8_HUMAN ALU S	5.29	4.92
	419925	AA159850	Hs.93765	lipoma HMGIC fusion partner	5.29	5.02
25	415192	D17793	Hs.78183	aldo-keto reductase family 1, member C3	5.28	5.33
	453999	BE328153	Hs.240087	ESTs	5.28	3.40
	408958	T99607	Hs.49346	signal recognition particle 54kD	5.28	2.84
	452496	AA114926	Hs.169531	ESTs	5.28	5.48
	424058	AL121516	Hs.138617	thyroid hormone receptor interactor 12	5.27	3.72
30	443265	AI916207	Hs.9167	SH3 domain binding glutamic acid-rich pr	5.26	4.62
	407013	U35637	Hs.83870	gb:Human nebulin mRNA, partial cds	5.26	6.21
	414602	AW630088	Hs.76550	Homo sapiens mRNA; cDNA DKFZp564B1264 (f	5.26	4.21
	410284	U50939	Hs.61828	amyloid beta precursor protein-binding p	5.26	4.43
35	445107	AI208121	Hs.147313	ESTs, Weakly similar to I38022 hypothei	5.25	5.61
	446267	AW450103	Hs.151124	ESTs	5.24	4.44
	422278	AF072873	Hs.114218	frizzled (Drosophila) homolog 6	5.23	3.14
	448585	AB020676	Hs.21543	KIAA0859 protein	5.23	6.21
	421993	R22497	Hs.110571	growth arrest and DNA-damage-inducible,	5.22	6.84
40	414407	AA147026	Hs.76704	ESTs	5.22	5.29
	423720	AL044191	Hs.23388	hypothetical protein DKFZp434F0318	5.22	5.85
	415997	NM_003590	Hs.78946	cutlin 3	5.21	3.66
	411531	AB014511	Hs.70604	ATPase, Class II, type 9A	5.21	3.95
	441619	NM_014056	Hs.7917	DKFZP564K247 protein	5.20	4.38
45	435232	NM_001262	Hs.4854	cyclin-dependent kinase inhibitor 2C (p1	5.19	4.52
	415167	AA160784	Hs.26410	ESTs	5.19	3.13
	431416	AA532718	Hs.178604	ESTs	5.18	5.38
	439995	AL137480	Hs.6834	KIAA1014 protein	5.17	3.14
	416784	AA334592	Hs.79914	lumican	5.17	6.18
50	446082	AI274139	Hs.156452	ESTs	5.16	5.14
	400196			Eos Control	5.16	5.05
	414525	C14904	Hs.45184	Homo sapiens cDNA FLJ12284 fis, clone MA	5.16	4.31
	414242	AA749230	Hs.26433	dolichyl-phosphate (UDP-N-acetylglucosam	5.15	4.89
	430699	AW969847	Hs.292718	ESTs, Weakly similar to RET2_HUMAN RETIN	5.14	5.22
55	440383	AA884208	Hs.30484	ESTs	5.13	5.09
	431628	AF146277		CD2-associated protein	5.13	5.03
	407047	X65965		gb:H.sapiens SOD-2 gene for manganese su	5.13	4.31
	433688	AA628467	Hs.112572	Homo sapiens cDNA FLJ14130 fis, clone MA	5.12	3.57
	437704	AA766142	Hs.131810	ESTs, Moderately similar to ALU1_HUMAN A	5.12	3.30
60	426101	AL049987		Homo sapiens mRNA; cDNA DKFZp564F112 (f	5.11	6.08
	428297	AA236291	Hs.183583	serine (or cysteine) proteinase inhibito	5.10	4.31
	416382	D86985	Hs.79276	KIAA0232 gene product	5.10	3.79
	437150	RS1407	Hs.77910	3-hydroxy-3-methylglutaryl-Coenzyme A sy	5.10	6.58
	454947	AW846590		gb:QV0-CT0180-011099-025-d07 CT0180 Homo	5.09	4.82
65	434647	W74158	Hs.103189	lipopolysaccharide specific response-68	5.09	4.90
	418730	AA091027	Hs.325625	Homo sapiens clone 23938 mRNA sequence	5.09	3.46
	449338	H73444	Hs.394	adrenomedullin	5.09	6.26
	438962	BE046594		gb:hn41c11.x1 NCL_CGAP_RDF2 Homo sapiens	5.08	5.60
	431693	AA59519		serine (or cysteine) proteinase inhibito	5.07	2.83
70	420583	H77859	Hs.65450	reticulon 4	5.06	6.71
	431048	RS0253	Hs.249129	cell death-inducing DFFA-like effector a	5.06	6.06
	432125	AW972667	Hs.183006	Homo sapiens cDNA FLJ12300 fis, clone MA	5.05	6.32
	447945	AI922838	Hs.9670	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.05	3.72
	442547	AA306997	Hs.217484	ESTs, Weakly similar to ALU1_HUMAN ALU S	5.05	2.86
75	414176	BE140638	Hs.75794	EDG-2 (endothelial differentiation, lys	5.03	4.43
	445263	H57646	Hs.42586	KIAA1560 protein	5.03	6.67
	448490	AI523897	Hs.271692	ESTs, Weakly similar to I38022 hypothei	5.03	4.88
	450515	AW304226		biphenyl hydrolase-like (serine hydrolas	5.03	4.36
	440624	AF017987	Hs.7306	secreted frizzled-related protein 1	5.01	5.48
80	417165	R80137	Hs.302738	Homo sapiens cDNA: FLJ21425 fis, clone C	5.01	5.61
	417640	D30857	Hs.82353	protein C receptor, endothelial (EPCR)	5.01	5.32
	413475	AW021488	Hs.26981	ESTs	5.01	3.90
	414792	BE314949	Hs.87128	hypothetical protein FLJ23309	5.00	4.54
	424074	AI902456	Hs.210761	ESTs, Weakly similar to I38022 hypothei	5.00	3.19



5	424620	AA101043	Hs.151254	kalikrein 7 (chymotryptic, stratum com	4.99	6.25
	439039	AI656707	Hs.48713	ESTs	4.99	6.60
	422305	AI928242	Hs.293438	ESTs, Highly similar to AF198488 1 trans	4.98	9.59
	410579	AK001628	Hs.64691	KIAA0483 protein	4.98	4.52
	449710	AA002207	Hs.17385	Homo sapiens clone IMAGE:119716, mRNA se	4.98	3.84
10	434230	AA551569		hypothetical protein PRO2822	4.98	3.63
	426468	AA379306	Hs.117558	ESTs	4.98	3.56
	421690	AW162667	Hs.106857	calbindin 2, (29kD, calretinin)	4.96	6.41
	448144	AW169230		ESTs, Moderately similar to PCA259 term	4.96	3.28
	412129	M21984	Hs.73454	troponin T3, skeletal, fast	4.96	5.75
15	450071	AA018283	Hs.24359	Homo sapiens cDNA FLJ111174 fs, clone PL	4.96	3.21
	439334	AW273261	Hs.216292	ESTs	4.95	4.39
	446320	AF126245	Hs.14791	acyl-Coenzyme A dehydrogenase family, me	4.95	4.01
	446161	AA628206	Hs.14125	p53 regulated PA26 nuclear protein	4.94	4.54
	453225	BE258769		acetyl-Coenzyme A acyltransferase 2 (mit	4.94	4.49
20	444476	AF020038	Hs.11223	isocitrate dehydrogenase 1 (NADP), solub	4.94	4.19
	445493	AI915771		metallothionein 1E (functional)	4.93	5.68
	422292	AI815733	Hs.114360	transforming growth factor beta-stimulat	4.93	5.47
	417054	AF017060		aldehyde oxidase 1	4.93	4.51
	425917	VW28517	Hs.117167	Homo sapiens cDNA: FLJ23067 fs, clone L	4.93	3.34
25	408681	AW953853	Hs.281462	ESTs, Weakly similar to I38022 hypothi	4.93	5.61
	451267	AI033894	Hs.117855	solute carrier family 17 (anion/sugar tr	4.92	3.27
	447137	AW970192	Hs.171942	ras responsive element binding protein 1	4.91	4.26
	427451	AI690816	Hs.178137	transducer of ERBB2, 1	4.90	6.00
	432314	AA533447	Hs.312989	ESTs	4.90	3.79
30	440692	AL031591	Hs.7370	phosphatidylinositol transfer protein, b	4.89	3.71
	428594	BE387236	Hs.75415	beta-2-microglobulin	4.89	3.27
	437802	AI475995	Hs.122910	ESTs	4.87	4.06
	437974	T74445	Hs.5957	Homo sapiens clone 24416 mRNA sequence	4.86	6.54
	427156	BE621719	Hs.173802	KIAA0603 gene product	4.86	5.15
35	433179	AW382945	Hs.162459	ESTs	4.86	5.50
	428957	NM_003881	Hs.194679	WNT1 inducible signaling pathway protein	4.85	5.29
	453855	AA039576	Hs.37858	ESTs, Weakly similar to ALU5_HUMAN !!!	4.85	3.59
	433143	BE552155	Hs.294035	ESTs, Weakly similar to ALU5_HUMAN ALU S	4.85	3.45
	429279	AB018271	Hs.198589	KIAA0728 protein	4.83	3.80
40	445773	H73456	Hs.13299	Homo sapiens mRNA: cDNA DKFZp761M0111 (f	4.82	4.20
	416349	X69089	Hs.79227	myomesin (M-protein) 2 (165kD)	4.82	4.01
	408138	AA535740		tumor protein p53-binding protein, 1	4.81	4.19
	432566	AW439330	Hs.256889	ESTs, Weakly similar to 2109260A B cell	4.80	3.99
	444677	AL110212	Hs.301005	purine-rich element binding protein B	4.80	3.50
45	422658	AF231981	Hs.250175	homolog of yeast long chain polyunsatura	4.80	10.20
	431926	AW972724		gb:EST384816 IMAGE resequences, MAGL Homo	4.79	4.39
	407839	AA045144	Hs.161566	ESTs	4.79	2.98
	421998	R74441		poly(A)-binding protein, nuclear 1	4.77	4.78
	416987	D86957	Hs.80712	KIAA0202 protein	4.76	3.99
50	448988	Y09763	Hs.22785	gamma-aminobutyric acid (GABA) A recepto	4.76	7.59
	440494	BE618768	Hs.7232	acetyl-Coenzyme A carboxylase alpha	4.75	4.38
	453180	N46243	Hs.110373	ESTs, Highly similar to T42626 secreted	4.75	3.92
	413276	Z24725	Hs.75260	mitogen inducible 2	4.75	5.68
	437239	AW503395	Hs.5541	ATPase, Ca transporting, ubiquitous	4.74	5.57
55	414622	AI752666	Hs.76669	nicotinamide N-methyltransferase	4.74	11.58
	429587	AA263969	Hs.334706	Homo sapiens cDNA FLJ111801 fs, clone HE	4.74	3.79
	407242	M18728		gb:Human nonspecific crossreacting antig	4.73	4.88
	445229	BE276013	Hs.172364	Homo sapiens mRNA for FLJ00086 protein,	4.73	4.79
	447429	AB007920	Hs.18586	KIAA0451 gene product	4.72	2.38
60	444930	BE185536	Hs.301183	molecule possessing ankryin repeats indu	4.71	5.10
	414848	AI803447	Hs.77496	small nuclear ribonucleoprotein polypept	4.71	2.51
	439652	V67826	Hs.55412	ESTs, Weakly similar to K1CJ_HUMAN KERAT	4.70	6.13
	453145	R63438	Hs.183454	Homo sapiens cDNA FLJ14883 fs, clone PL	4.70	3.06
	421302	T34462	Hs.103291	neurtin	4.69	4.96
65	425118	AL076611	Hs.154672	methylene tetrahydrofolate dehydrogenase	4.68	5.01
	448079	R76981		thyroid hormone receptor-associated prot	4.68	3.97
	434558	AW264102	Hs.39168	ESTs	4.67	3.42
	408239	AA053401		ESTs, Moderately similar to ALU7_HUMAN A	4.67	6.17
	454416	AI912097	Hs.163208	ESTs	4.66	3.97
70	427215	AW246148	Hs.268371	hypothetical protein FLJ20274	4.66	3.37
	451583	AI653797	Hs.24133	ESTs	4.65	3.81
	446525	AW967069	Hs.211556	hypothetical protein MGCS487	4.65	6.14
	436176	AL121422	Hs.54900	serologically defined colon cancer antig	4.65	3.65
	450528	NM_014072	Hs.25063	PRO0461 protein	4.64	2.99
75	417259	AW903838	Hs.81800	chondroitin sulfate proteoglycan 2 (vers	4.64	4.72
	408741	M73720	Hs.646	carboxypeptidase A3 (mast cell)	4.63	5.55
	417733	AL048678	Hs.82503	H.sapiens mRNA for 3'UTR of unknown prot	4.63	5.04
	436280	AI690734		Homo sapiens cDNA: FLJ22562 fs, clone H	4.63	3.55
	428744	BE267033	Hs.192853	ubiquitin-conjugating enzyme E2G 2 (homo	4.63	2.85
80	427007	NM_006283	Hs.173159	transforming, acidic coiled-coil contain	4.63	3.00
	453767	AB011792	Hs.35094	extracellular matrix protein 2, female o	4.62	5.14
	449971	AA807346	Hs.288581	Homo sapiens cDNA FLJ14296 fs, clone PL	4.62	4.49
	409598	NM_014018	Hs.55097	mitochondrial ribosomal protein S28	4.62	3.56
	413305	NM_000426	Hs.323511	Homo sapiens cDNA: FLJ23176 fs, clone L	4.62	4.24
	412577	Z22968	Hs.74076	CD163 antigen	4.61	8.03
	424046	AF027866	Hs.138202	serine (or cysteine) proteinase inhibito	4.61	6.86
	452289	BE566205	Hs.28827	mitogen-activated protein kinase kinase	4.61	4.33



5	458971	AL119206	Hs.101874	ESTs, Weakly similar to ALU1_HUMAN ALU S	4.61	4.16
	433256	AW604447	Hs.339408	ESTs, Weakly similar to S26689 hypothei	4.61	3.58
	440596	H13032	Hs.103378	hypothetical protein MGC11034	4.61	3.22
	427919	AA173942	Hs.326416	Homo sapiens mRNA; cDNA DKFZp564H1916 (I	4.60	4.74
	424651	AJ493206	Hs.32425	ESTs	4.60	4.11
	436701	AW959032		ESTs, Moderately similar to 178885 serin	4.60	2.34
	413691	AB023173	Hs.75478	ATPase, Class VI, type 118	4.59	4.35
	448625	AW970786	Hs.178470	hypothetical protein FLJ22662	4.59	4.00
10	435283	AJ480319	Hs.120058	ESTs	4.59	3.76
	451710	AW867467	Hs.278712	eukaryotic translation initiation factor	4.59	3.51
	436086	Z43133	Hs.9961	Homo sapiens cDNA: FLJ21954 fs, clone H	4.59	3.64
	434697	AL133033	Hs.4084	KIAA1025 protein	4.58	5.10
	402294			Target Exon	4.57	5.47
	424098	AF077374	Hs.139322	small proline-rich protein 3	4.57	5.12
15	406648	AA563730	Hs.277477	major histocompatibility complex, class	4.57	4.66
	428423	AU076517	Hs.184276	solute carrier family 9 (sodium/hydrogen	4.57	4.15
	441566	AA604110	Hs.151725	ESTs	4.57	3.21
	400109			Eos Control	4.56	4.76
20	419740	AB037835	Hs.92991	KIAA1414 protein	4.56	3.63
	421481	AW391972	Hs.104696	KIAA1324 protein	4.55	7.16
	440266	AA086809	Hs.19525	hypothetical protein FLJ22794	4.55	4.44
	421979	AW062518	Hs.233150	hypothetical protein MGC5560	4.55	4.36
	408702	AW959893	Hs.27099	hypothetical protein FLJ23293 similar to	4.54	5.78
25	418021	M15881	Hs.1137	uromodulin (uromucoid, Tamm-Horsfall gly	4.54	4.61
	422068	AJ807519	Hs.104520	Homo sapiens cDNA FLJ13694 fs, clone PL	4.54	4.32
	421986	AL137438	Hs.110454	SEC15 (S. cerevisiae)-like	4.54	2.59
	414798	AJ286323	Hs.97411	hypothetical protein MGC12335	4.53	6.18
	410132	NM_003480	Hs.300945	Microfibril-associated glycoprotein-2	4.53	5.87
30	449843	R85337	Hs.24030	solute carrier family 31 (copper transpo	4.53	4.87
	424399	AJ905687		AJ905687:IL-BT095-190199-019 BT095 Homo	4.53	10.61
	452924	AW580939	Hs.97199	complement component C1q receptor	4.51	6.07
	454000	AA040620	Hs.5672	hypothetical protein AF140225	4.51	4.59
	404730			Target Exon	4.51	4.30
35	449943	AF104266	Hs.24212	latrophilin	4.51	3.40
	414217	AJ309298	Hs.279898	Homo sapiens cDNA: FLJ23165 fs, clone L	4.50	2.97
	435992	AJ033259	Hs.118317	Homo sapiens cDNA FLJ12088 fs, clone HE	4.50	4.77
	421311	N71848	Hs.283609	hypothetical protein PRO2032	4.50	3.30
	449785	AJ225235	Hs.288300	hypothetical protein FLJ23231	4.49	5.06
40	437611	AA897108		gb:am08a06.s1 Soares_NFL_T_GBC_S1 Homo s	4.49	4.24
	419612	AJ498267	Hs.110613	KIAA0421 protein	4.49	4.16
	414496	W73853		ESTs	4.49	3.15
	450306	AL080080	Hs.24766	thioredoxin domain-containing	4.48	3.38
	444895	AJ674383	Hs.22891	solute carrier family 7 (cationic amino	4.47	4.45
45	432559	AW452948	Hs.257631	ESTs	4.47	5.39
	442554	AW467376	Hs.129640	ESTs	4.47	4.00
	421429	NM_014922	Hs.104305	death effector filament-forming Ced-4-li	4.46	4.47
	422313	AF045941	Hs.115166	scleritin	4.45	5.07
	435748	AA699756	Hs.117335	ESTs	4.45	3.35
50	453283	AA694386	Hs.290914	ESTs	4.45	3.28
	441925	R83113		protein kinase C substrate 80K-H	4.45	3.28
	440030	AA932693		EST	4.45	3.20
	445515	AL048875		hypothetical protein DKFZp5661133	4.44	3.66
55	406707	S73840	Hs.931	myosin, heavy polypeptide 2, skeletal mu	4.44	5.90
	432341	AL137662	Hs.274401	Homo sapiens mRNA; cDNA DKFZp434P086 (tr	4.44	3.99
	410453	AW749036		gb:RC2-BT0318-241199-011-110 BT0318 Homo	4.44	3.49
	450196	AW956868	Hs.24608	DKFZP5640177 protein	4.43	4.13
	444147	AB002306	Hs.10351	KIAA0308 protein	4.43	3.95
	427809	M26380	Hs.180878	lipoprotein lipase	4.42	3.88
60	428157	AJ738719	Hs.198427	hexokinase 2	4.42	5.46
	413299	AA857487	Hs.75275	ubiquitination factor E4A (homologous to	4.42	3.77
	440245	AK001913	Hs.7100	hypothetical protein	4.42	3.51
	442379	NM_004613	Hs.8265	transglutaminase 2 (C polypeptide, prote	4.42	1.79
	408569	BE068047	Hs.86412	chromosome 9 open reading frame 5	4.42	3.35
65	430361	AJ033965	Hs.239926	sterol-C4-methyl oxidase-like	4.41	5.78
	414489	AJ620677	Hs.73105	ESTs	4.41	5.43
	447731	AA373527	Hs.19385	CGI-58 protein	4.41	5.28
	443195	BE148235	Hs.193063	Homo sapiens cDNA FLJ14201 fs, clone NT	4.41	4.41
	448503	BE243146	Hs.21332	BTB (POZ) domain containing 1	4.41	3.68
70	432546	BE618778	Hs.180638	hypothetical protein FLJ13081	4.41	3.55
	445620	AJ245225	Hs.17441	ESTs	4.41	3.44
	454065	BE394588		gb:601311808F1 NIH_MGC_44 Homo sapiens c	4.41	3.43
	418802	AB026989	Hs.88500	mitogen-activated protein kinase 8 inter	4.40	2.04
	431816	T87431	Hs.190738	ESTs	4.39	4.26
75	429138	AB020657	Hs.197298	NS1-binding protein	4.39	4.47
	426643	AA857131	Hs.171595	HIV TAT specific factor 1	4.39	3.09
	448943	AJ608810	Hs.193288	ESTs	4.39	2.63
	414002	NM_006732	Hs.75678	FBJ murine osteosarcoma viral oncogene h	4.37	19.16
	403593			Target Exon	4.37	6.35
80	408104	AW972927	Hs.293968	ESTs	4.31	5.82
	429624	AA458648	Hs.99476	ESTs, Weakly similar to 1313184B alpha1	4.31	4.14
	429538	BE182592	Hs.139322	small proline-rich protein 2A	4.25	6.61
	414505	R45389	Hs.23558	ESTs, Weakly similar to A48042 lysosomal	4.18	5.28
	438533	AJ440266	Hs.170673	ESTs, Weakly similar to T24832 hypothei	4.18	5.81

5	426143	BE379836		proteasome (prosome, macropain) subunit,	4.15	5.12
	414527	BE241739	Hs.76359	catalase	4.14	5.13
	422287	F16365	Hs.114346	cytochrome c oxidase subunit VIIa polype	4.13	8.60
	408199	AA132637	Hs.15396	Homo sapiens, clone IMAGE:3948909, mRNA,	4.12	5.94
	412477	AA150864		microsomal glutathione S-transferase 1	4.10	10.00
10	411558	AA102670	Hs.70725	gamma-aminobutyric acid (GABA) A recepto	4.09	5.39
	444252	R21135	Hs.54985	ESTs	4.07	6.01
	400295	W72838		A1905687:IL-BT095-190199-019 BT095 Homo	4.06	13.32
	438746	AI885815	Hs.184727	Human melanoma-associated antigen p97 (m	4.06	7.57
	429856	AA971576	Hs.225951	topoisomerase-related function protein 4	4.05	6.24
15	422168	AA586894	Hs.112408	S100 calcium-binding protein A7 (psorias	4.01	4.61
	403710			C4000160.gij12735793[refXP_011928.1] pr	4.00	4.06
	406643	N77976	Hs.347939	hemoglobin, alpha 2	3.97	7.22
	436372	AW972301	Hs.310286	ESTs	3.96	5.41
	428340	AF261088	Hs.154721	aconitase 1, soluble	3.94	5.33
20	424604	AW865388	Hs.151076	KIAA1243 protein	3.91	7.59
	426653	AA530892	Hs.171635	dual specificity phosphatase 1	3.91	14.81
	410204	AJ243425	Hs.326035	early growth response 1	3.87	9.96
	448520	AB002367	Hs.21355	doublecortin and CaM kinase-like 1	3.87	5.09
	443021	AA368546	Hs.8904	Ig superfamily protein	3.86	7.65
25	430418	R98852	Hs.35029	heart and neural crest derivatives expre	3.81	6.19
	447796	AW953622	Hs.223025	RAB31, member RAS oncogene family	3.76	5.10
	419407	AW410377	Hs.41502	hypothetical protein FLJ21276	3.76	5.12
	443725	AW245680	Hs.9701	growth arrest and DNA-damage-inducible,	3.75	5.46
	426281	AK000987	Hs.169111	oxidation resistance 1	3.74	5.14
30	423973	AF038461	Hs.136574	arachidonate 12-lipoxygenase, 12R type	3.74	6.30
	445234	AW137636	Hs.146059	ESTs	3.72	5.59
	457411	AW085961	Hs.130093	iroquois-class homeobox protein IRX2	3.71	4.85
	456063	NM_006744	Hs.76461	retinol-binding protein 4, interstitial	3.71	6.72
	413880	AJ660842	Hs.110915	interleukin 22 receptor	3.71	4.01
35	422640	M37984	Hs.118845	tropoin C, slow,	3.71	9.10
	452241	AL050204	Hs.28540	Homo sapiens mRNA; cDNA DKFZp586F1223 (I	3.70	3.21
	453560	AA348626	Hs.5890	hypothetical protein FLJ23306	3.69	5.13
	410197	NM_005518	Hs.59889	3-hydroxy-3-methylglutaryl-Coenzyme A sy	3.69	7.69
	413922	AJ535895	Hs.221024	ESTs	3.68	4.80
40	428698	AA852773	Hs.334838	KIAA1866 protein	3.64	5.22
	451951	AW082870	Hs.210954	ESTs	3.64	3.69
	425308	AI67560	Hs.61297	ESTs	3.64	4.35
	441128	AA570256		ESTs, Weakly similar to T23273 hypotheti	3.63	2.91
	421978	AJ243662	Hs.110196	NICE-1 protein	3.61	6.05
45	418533	NM_004533	Hs.85937	myosin-binding protein C, fast-type	3.61	6.22
	452413	AW082633	Hs.215030	ESTs	3.58	3.03
	453003	AA808466	Hs.103395	hypothetical protein FLJ14146	3.55	6.39
	408522	AJ541214	Hs.46320	Small proline-rich protein SPRK [human,	3.54	10.68
	423503	M92843	Hs.343586	zinc finger protein homologous to Zfp-36	3.53	15.11
50	419879	Z17805	Hs.93564	Homer, neuronal immediate early gene, 2	3.53	5.29
	428382	AF007132	Hs.184019	Homo sapiens clone 23551 mRNA sequence	3.51	4.46
	447165	AL042400	Hs.75668	Homo sapiens, Similar to RIKEN cDNA 1700	3.51	3.67
	418067	AI127958	Hs.83393	cystatin E/M	3.51	3.74
	420202	AL036557	Hs.95910	putative lymphocyte G0/G1 switch gene	3.50	14.64
55	432543	AA552690	Hs.152423	Homo sapiens cDNA: FLJ21274 fs, clone C	3.50	2.79
	442321	AF207664	Hs.8230	a disintegrin-like and metalloprotease (	3.48	7.91
	450860	AA021007		integrin, beta 8	3.47	5.89
	414665	AA160873		serum amyloid A1	3.46	9.22
	413663	BE247585	Hs.75452	BTG family, member 2	3.46	5.63
60	427408	AA583206	Hs.2156	RAR-related orphan receptor A	3.45	3.08
	430171	AF085289	Hs.234766	skin-specific protein	3.45	4.77
	453655	AW960427	Hs.342874	transforming growth factor, beta recepto	3.42	8.09
	450607	AL050373	Hs.25213	hypothetical protein	3.41	6.43
	412596	AA161219	Hs.799	diphtheria toxin receptor (heparin-bindi	3.41	6.10
65	427681	AB018263	Hs.180338	tumor necrosis factor receptor superfam	3.39	6.59
	440590	AI863446	Hs.266308	mosaic serine protease	3.34	3.09
	452669	AA216363	Hs.262958	hypothetical protein DKFZp434B044	3.31	10.06
	422101	AW404176	Hs.111611	ribosomal protein L27	3.30	3.93
	431986	AA536130	Hs.149018	Novel human gene mapping to chromosome 20	3.30	3.54
70	412649	NM_002206	Hs.74359	integrin, alpha 7	3.28	6.89
	423017	AW178761	Hs.227948	serine (or cysteine) proteinase inhibito	3.28	5.44
	425163	D10040	Hs.154890	fatty-acid-Coenzyme A ligase, long-chain	3.28	5.93
	412061	AA833763	Hs.330211	ESTs	3.27	5.75
	437592	NM_003851	Hs.5710	cellular repressor of E1A-stimulated gen	3.27	5.83
75	452849	AF044924	Hs.30792	hook2 protein	3.26	5.66
	421462	AF016495	Hs.104624	aquaporin 9	3.25	4.98
	422083	NM_001141	Hs.111256	arachidonate 15-lipoxygenase, second typ	3.24	6.56
	444935	AA262449	Hs.223569	ESTs	3.24	5.96
	422057	AI205785	Hs.30348	ESTs	3.22	6.72
80	410017	AW952426	Hs.109438	Homo sapiens clone 24775 mRNA sequence	3.21	5.26
	407948	AW085161	Hs.56279	ICEBERG caspase-1 inhibitor	3.21	4.61
	452089	T97294	Hs.271492	ESTs, Weakly similar to PC4211 hepatocel	3.19	4.42
	448249	AW855331	Hs.337124	ESTs	3.18	2.97
	430869	D10511	Hs.37	acetyl-Coenzyme A acetyltransferase 1 (a	3.17	5.66
	443623	AA345519	Hs.9641	complement component 1, q subcomponent,	3.16	12.00
	452865	AJ924046	Hs.119567	ESTs, Weakly similar to A47582 B-cell gr	3.16	6.03
	452392	L20815	Hs.507	corneodesmosin	3.15	5.70

5	410231	AA314163	Hs.61153	proteasome (prosome, macropain) 26S subu	3.15	5.87
	420309	AW043637	Hs.21766	ESTs, Weakly similar to ALU5_HUMAN ALU S	3.15	4.98
	406791	AI220684	Hs.347939	hemoglobin, alpha 2	3.13	17.37
	419648	T73661	Hs.91877	thyroid hormone responsive SPOT14 (rat)	3.12	4.63
	421485	AA243499	Hs.104800	hypothetical protein FLJ10134	3.12	3.02
	432375	BE536069	Hs.2962	S100 calcium-binding protein P	3.12	8.51
	417713	O42047	Hs.82432	KIAA0089 protein	3.12	5.82
	446948	BE409053	Hs.299629	peroxisomal long-chain acyl-coA thioeste	3.11	6.51
	444195	AB002351	Hs.10587	KIAA0353 protein	3.11	5.44
10	415704	NM_001677	Hs.78629	ATPase, Na <sup>+</sup> transporting, beta 1 polypep	3.11	6.61
	401905			ENSP00000252232: Sterol regulatory eleme	3.10	3.52
	443071	AL080021	Hs.8986	complement component 1, q subcomponent,	3.10	5.10
	427095	AA316080	Hs.173554	ubiquinol-cytochrome c reductase core pr	3.10	5.39
	413835	AI272727	Hs.249163	fatty acid hydroxylase	3.08	5.56
15	448106	AI800470	Hs.171941	ESTs	3.07	5.19
	432908	AI861896		ESTs	3.07	3.47
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	3.07	7.48
	429506	D49835	Hs.171942	ras responsive element binding protein 1	3.05	3.97
	424998	U58515	Hs.154138	chitinase 3-like 2	3.02	6.75
20	419358	T78763	Hs.90063	neurocalcin delta	3.00	7.68
	414541	BE293116	Hs.76392	aldehyde dehydrogenase 1 family, member	2.99	5.44
	426402	BE387327	Hs.80475	polymerase (RNA) II (DNA directed) polyp	2.99	6.84
	450472	AI190071	Hs.55278	ESTs	2.98	5.06
25	421335	X99977	Hs.103505	ARS component B	2.97	9.31
	431316	AA502663	Hs.145037	ESTs	2.96	4.30
	420996	AK001927	Hs.100895	hypothetical protein FLJ10462	2.96	2.97
	451176	AA046457	Hs.60677	ESTs	2.95	6.59
	444204	AI129194	Hs.143040	ESTs	2.93	3.92
30	438723	AW975895	Hs.307486	ESTs	2.93	6.64
	436664	AW197887	Hs.253353	ESTs	2.93	3.82
	406962	M13485		gb:Human metallothionein I-B gene, exon	2.93	3.10
	453092	X64838	Hs.31638	restin (Reed-Steinberg cell-expressed in	2.93	5.35
	444734	NM_001360	Hs.11806	7-dehydrocholesterol reductase	2.91	9.84
35	430310	U60115	Hs.239069	four and a half LIM domains 1	2.91	7.02
	420876	AA918425	Hs.177744	ESTs	2.91	5.41
	426050	AF017307	Hs.166096	E74-like factor 3 (ets domain transcript	2.91	5.64
	428232	BE272452	Hs.183109	monoamine oxidase A	2.90	9.54
	413796	AW408094	Hs.75545	interleukin 4 receptor	2.89	5.37
40	413884	AI668892	Hs.239758	hypothetical protein FLJ12389 similar to	2.88	5.34
	411372	AI147861	Hs.213289	low density lipoprotein receptor (famil	2.86	6.31
	428500	AI815395	Hs.184641	fatty acid desaturase 2	2.86	3.93
	444135	AK000374	Hs.10346	hypothetical protein FLJ20154	2.86	6.05
	452689	F33868	Hs.284176	transferrin	2.85	6.11
45	403108			ENSP00000241415: Hypothetical 67.7 kDa p	2.85	3.17
	434433	AW629759		gb:hh70e05.y1 NCI_CGAP_GU1 Homo sapiens	2.84	3.35
	434952	T10269	Hs.4285	Homo sapiens cDNA: FLJ22505 fis, clone H	2.83	4.05
	420544	AA677577	Hs.98732	Homo sapiens Chromosome 16 BAC clone CIT	2.83	3.57
	406922	S70284	Hs.119597	gb:stearoyl-CoA desaturase (human, adipo	2.82	3.80
50	437470	AL390147	Hs.134742	hypothetical protein DKFZp547D065	2.82	6.40
	429807	AK002138	Hs.306227	Homo sapiens cDNA FLJ11276 fis, clone PL	2.82	2.97
	425180	U00115	Hs.155024	B-cell CLL/lymphoma 6 (zinc finger prote	2.81	5.15
	415409	AW993701		NS1-associated protein 1	2.80	6.16
	433848	AF095719	Hs.93764	carboxypeptidase A4	2.80	2.88
55	425750	AL050276	Hs.42400	zinc finger protein 288	2.79	5.99
	433638	AW872507	Hs.3462	cytochrome c oxidase subunit VIc	2.78	5.25
	429128	AA446869	Hs.119316	ESTs	2.78	4.17
	446292	AF081497	Hs.279682	Rh type C glycoprotein	2.77	7.37
	430420	AW140027	Hs.26373	Homo sapiens cDNA: FLJ23449 fis, clone H	2.76	6.09
60	419923	AW081455	Hs.120219	ESTs	2.76	4.31
	407555	Z48511		gb:H.sapiens XG mRNA (clone PEP11).	2.76	4.12
	425240	AA306495	Hs.1869	phosphoglucosylase 1	2.74	5.92
	459317	BRCA1b		Eos Control	2.74	19.85
	425819	N92165	Hs.93231	ESTs	2.74	5.72
65	408839	AW277084		gb:xp61h09.x1 NCI_CGAP_Ov39 Homo sapiens	2.73	3.93
	418253	AA215539	Hs.283643	Homo sapiens cDNA FLJ11606 fis, clone HE	2.72	5.94
	409453	AI885516	Hs.95612	ESTs	2.72	6.51
	406625	Y13647	Hs.119597	stearoyl-CoA desaturase (delta-9-desatur	2.72	3.80
	420074	AA253425	Hs.190074	ESTs	2.71	4.04
70	429547	AW009166	Hs.99376	FGENESH predicted novel secreted protein	2.71	2.84
	444026	AA205759	Hs.10119	hypothetical protein FLJ14957	2.71	6.17
	407112	AA070801	Hs.51615	ESTs, Weakly similar to ALU7_HUMAN ALU S	2.70	5.23
	429615	AF258627	Hs.211562	ATP-binding cassette, sub-family A (ABC1	2.69	5.33
	419098	AA234041	Hs.87271	ESTs	2.69	3.22
75	424206	NM_003734	Hs.198241	amine oxidase, copper containing 3 (vasc	2.69	6.64
	443102	AI247472	Hs.132965	ESTs	2.68	5.85
	411939	AI365585	Hs.146246	ESTs	2.68	5.38
	453201	AI432195	Hs.135098	ESTs	2.68	3.69
	420231	RO6866	Hs.19813	ESTs	2.67	4.70
80	404996			Target Exon	2.67	4.97
	452955	AW390282	Hs.31130	transmembrane 7 superfamily member 2	2.66	6.36
	447205	BE617015	Hs.11006	ESTs, Moderately similar to T17372 plasm	2.65	15.65
	417365	D50683	Hs.82028	transforming growth factor, beta recepto	2.65	7.74
	444169	AV648170	Hs.58756	ESTs	2.64	3.40

5	431247	AL021578	Hs.278489	matrin 4	2.64	3.35
	423960	AA164516	Hs.136309	SH3-containing protein SH3GLB1	2.63	5.12
	432093	H28383		gbv52c03.1 Soares breast 3NbHBst Homo	2.63	4.08
	408669	AI493591	Hs.78146	platelet/endothelial cell adhesion molec	2.61	6.44
	440924	AF151872	Hs.7527	small fragment nuclease	2.59	6.37
10	416232	AW502678	Hs.79090	exportin 1 (CRM1, yeast, homolog)	2.59	6.46
	425320	U29344	Hs.83190	fatty acid synthase	2.59	3.93
	402315			NM_003430:Homo sapiens zinc finger prote	2.58	6.09
	449539	W80363	Hs.58446	ESTs	2.58	4.05
	418271	NM_000919	Hs.83920	peptidylglycine alpha-amidating monooxyg	2.58	5.61
15	449967	R40978	Hs.271498	ESTs, Moderately similar to ALU1_HUMAN A	2.58	3.54
	438752	AW238673	Hs.146038	ESTs	2.58	5.24
	424675	NM_005512	Hs.151641	glycoprotein A repetitions predominant	2.57	5.16
	438763	AI583207	Hs.99029	CCAAT/enhancer binding protein (C/EBP),	2.57	6.45
	413630	AL036883	Hs.75450	delta sleep inducing peptide, immunoreac	2.56	6.38
20	424834	AK001432	Hs.153408	Homo sapiens cDNA FLJ10570 fs, clone NT	2.56	2.90
	427666	AI791495	Hs.180142	calmodulin-like skin protein (CLSP)	2.56	2.67
	426403	NM_000361	Hs.2030	thrombomodulin	2.56	5.19
	432906	BE265489	Hs.3123	lethal giant larvae (Drosophila) homolog	2.55	5.62
	420924	R01026	Hs.245321	ESTs	2.55	3.22
25	427527	AI809057	Hs.153261	immunoglobulin heavy constant mu	2.55	5.45
	407083	Z48511		H.sapiens XG mRNA (clone PEP11)	2.55	4.50
	445437	AI224165	Hs.148725	ESTs	2.54	4.72
	425097	NM_014247		PDZ domain containing guanine nucleotide	2.54	5.28
	420105	AW015571	Hs.32244	ESTs, Weakly similar to FMOD_HUMAN FIBRO	2.53	6.55
30	429554	NM_012275	Hs.207224	Interleukin 1, delta	2.53	2.84
	408896	AI610447	Hs.48778	niban protein	2.53	7.08
	409169	F00991	Hs.50889	(clone FWHLC2-24) myosin light chain 2	2.52	8.68
	420235	AA256756	Hs.31178	ESTs	2.51	4.21
	436314	AI983409		ESTs	2.51	3.11
35	440602	AI743491	Hs.292692	ESTs	2.50	2.71
	444946	AW139205	Hs.156457	hypothetical protein FLJ22408	2.48	2.86
	430235	BE268048	Hs.236494	RAB10, member RAS oncogene family	2.48	5.37
	423929	M69136	Hs.135626	chymase 1, mast cell	2.48	3.21
	426689	BE245550	Hs.171825	basic helix-loop-helix domain containing	2.48	7.88
40	421811	AA022550	Hs.108548	PABP-interacting protein 2	2.48	5.28
	414420	AA043424	Hs.76095	immediate early response 3	2.47	8.33
	420693	NM_001972	Hs.99863	elastase 2, neutrophil	2.47	2.78
	420139	NM_005357	Hs.95351	lipase, hormone-sensitive	2.46	10.12
	447179	AW015633	Hs.157299	ESTs	2.46	3.45
45	451687	AL041260	Hs.26837	Homo sapiens mRNA; cDNA DKFZp586K1123 (f	2.46	5.47
	420322	AB014555	Hs.96731	huntingtin interacting protein-1-related	2.45	6.18
	421064	AI245432	Hs.101382	tumor necrosis factor, alpha-induced pro	2.45	5.75
	421818	AW992976	Hs.50098	NM_002489:Homo sapiens NADH dehydrogenas	2.45	6.73
	412524	AA417813	Hs.44208	hypothetical protein FLJ23153	2.44	10.55
50	439639	AA370045	Hs.6607	AXIN1 up-regulated	2.44	5.22
	436009	H57130	Hs.120925	ESTs	2.44	2.94
	414814	D14697	Hs.77393	lamesyl diphosphate synthase (lamesyl	2.43	5.17
	434060	AA744902	Hs.197922	hypothetical protein PRO1489	2.43	5.56
	425335	BE394327	Hs.296267	folistatin-like 1	2.43	10.52
55	406997	U07807		metallothionein IV	2.42	4.35
	431545	AF095703	Hs.8110	L-3-hydroxyacyl-Coenzyme A dehydrogenase	2.42	6.72
	417029	AW952192	Hs.273385	guanine nucleotide binding protein (G pr	2.41	5.22
	412825	AW167439	Hs.190651	Homo sapiens cDNA FLJ13625 fs, clone PL	2.41	5.56
	445462	AA378776	Hs.288649	hypothetical protein MGC3077	2.41	5.24
60	448954	AB014564	Hs.22616	KIAA0664 protein	2.40	5.31
	447218	BE617752	Hs.10748	hypothetical protein DKFZp434B195	2.40	5.24
	423810	AL132665	Hs.132955	BCL2/adenovirus E1B 19kD-interacting pro	2.39	5.55
	450440	AB024334	Hs.25001	tyrosine 3-monooxygenase/tryptophan 5-mo	2.39	7.63
	430356	N87990	Hs.239870	Homo sapiens mRNA; cDNA DKFZp564H0764 (f	2.38	5.99
65	418355	L42563	Hs.1165	ATPase, H <sup>+</sup> transporting, nongastric, alp	2.38	3.84
	416273	AW575691	Hs.79123	KIAA0084 protein	2.38	5.22
	427272	NM_001096	Hs.174140	ATP citrate lyase	2.38	5.41
	437186	AA338305	Hs.5472	hypothetical protein FLJ20173	2.35	5.13
	443679	AK001810	Hs.9670	hypothetical protein FLJ10948	2.33	5.81
70	431179	AI338644	Hs.195432	aldehyde dehydrogenase 2 family (m)cho	2.33	7.89
	418400	BE243026	Hs.301989	KIAA0245 protein	2.33	5.36
	456876	AL044870	Hs.208780	ESTs, Weakly similar to T29647 hypotheti	2.32	3.27
	407082	Z47055		gb:Human partial cDNA sequence, lamesyl	2.31	4.65
	426508	W23184	Hs.170171	glutamate-ammonia ligase (glutamine synt	2.31	9.37
75	408536	AW381532	Hs.135188	ESTs	2.31	2.60
	410552	X66945	Hs.748	fibroblast growth factor receptor 1 (fms	2.30	5.94
	437201	F29279	Hs.171625	hypothetical protein MGC14697	2.30	5.75
	417314	N68168		gb:za11c01.s1 Soares fetal liver spleen	2.30	3.12
	433738	AI684802		ESTs	2.30	3.91
80	410531	AW752953		gb:QV0-CT0224-261099-035-g02 CT0224 Homo	2.29	3.61
	422491	AA338548	Hs.117546	neuronalin	2.29	5.66
	434411	AA632649	Hs.201372	ESTs	2.28	4.40
	451926	AW134519	Hs.96125	Homo sapiens, Similar to clone FLB3816,	2.28	5.14
	401131			NM_001651*:Homo sapiens aquaporin 5 (AQP	2.27	5.62
	401205			Target Exon	2.27	2.98
	422109	S73265	Hs.1473	gastrin-releasing peptide	2.26	3.94
	456646	AJ243662	Hs.110196	NICE-1 protein	2.26	2.52

	443049	AJ028513	Hs.132343	ESTs	2.25	3.13
	440160	BE560269	Hs.7010	NPD002 protein	2.25	4.93
	438367	N79688	Hs.204354	ras homolog gene family, member B	2.25	9.58
5	442987	AA075975		Homo sapiens clone TCCGIA00427 mRNA sequ	2.24	6.19
	421545	AA292810	Hs.90034	hypothetical protein FLJ21916	2.24	2.58
	447150	AI439011	Hs.86386	myeloid cell leukemia sequence 1 (BCL2-r	2.23	9.03
	450014	N41322	Hs.18441	ESTs	2.23	4.50
	426611	BE178050	Hs.171271	catenin (cadherin-associated protein), b	2.22	5.64
	434039	L32977	Hs.3712	ubiquinol-cytochrome c reductase, Rieske	2.22	5.57
10	427569	BE299197	Hs.179665	cyclin-dependent kinase inhibitor 1A (p2	2.22	5.10
	444637	T19101	Hs.11494	fibulin 5	2.22	6.43
	406710	AJ708347	Hs.184014	ribosomal protein L31	2.21	9.10
	424909	S78187	Hs.153752	cell division cycle 25B	2.20	6.13
	407228	M25079	Hs.155376	hemoglobin, beta	2.20	11.34
15	450612	AL359946	Hs.14779	acetyl-CoA synthetase	2.20	7.03
	458568	AI769067	Hs.127824	ESTs, Weakly similar to T28770 hypotheti	2.20	5.68
	407370	AA682384	Hs.182084	ESTs	2.20	7.00
	438942	AW875398	Hs.6451	PRO0659 protein	2.19	6.09
20	400228			NM_021724*:Homo sapiens nuclear receptor	2.19	6.95
	410185	BE294068	Hs.737	immediate early protein	2.18	11.72
	428150	AW950547	Hs.70312	cytochrome c oxidase subunit VIIa polype	2.17	7.05
	400307	AF005081		Homo sapiens skin-specific protein (xp32	2.17	6.41
	424425	AB031480	Hs.146824	SPR1 protein	2.17	3.68
25	414459	Y11525	Hs.76171	CCAAT/enhancer binding protein (C/EBP),	2.17	3.11
	400082			Eos Control	2.16	8.40
	434702	AL039734	Hs.4099	nardilysin (N-arginine dibasic convertas	2.16	6.83
	439651	AF086480	Hs.56255	ESTs	2.16	3.72
	431838	AI097229	Hs.217484	ESTs, Weakly similar to ALU1_HUMAN ALU S	2.15	3.34
30	420225	AW243046	Hs.282076	Homo sapiens mRNA for KIAA1650 protein,	2.14	6.20
	428848	NM_000230	Hs.194236	leptin (murine obesity homolog)	2.14	3.42
	415213	NM_002933	Hs.78224	ribonuclease, RNase A family, 1 (pancrea	2.14	9.81
	434454	AF217798	Hs.3850	US1-interacting protein NUDEL; endoolig	2.14	6.75
	452467	AW500815		ESTs	2.13	4.66
35	418226	AA424202	Hs.83834	cytochrome b-5	2.13	5.41
	414815	AW292140	Hs.130286	ESTs	2.12	4.14
	430967	H16791	Hs.100895	ESTs	2.12	4.14
	426102	AF200496	Hs.166371	interleukin 1, zeta	2.12	3.77
	410223	S73775	Hs.60708	calsequestrin 1 (fast-twitch, skeletal m	2.11	5.30
40	439518	W76326		gb:zd60d04.r1 Soares_fetal_heart_NbHH19W	2.11	4.01
	427228	AA115770	Hs.174051	small nuclear ribonucleoprotein 70kD pol	2.10	5.13
	436961	AW375974	Hs.156704	ESTs	2.10	3.33
	417139	M69043	Hs.81328	nuclear factor of kappa light polypeptid	2.10	8.13
	445831	NM_006055	Hs.13351	LanC (bacterial lanthiobiotic synthetase c	2.08	5.42
45	431593	NM_002108	Hs.276590	ESTs	2.08	4.43
	423887	AL080207	Hs.134585	DKFZP434G232 protein	2.08	3.92
	424389	AA339786		lymphocyte-specific protein 1	2.07	5.52
	407394	AF005081		gb:Homo sapiens skin-specific protein (x	2.06	5.93
	400198			Eos Control	2.05	10.48
50	426335	AI054347	Hs.2017	ribosomal protein L38	2.04	5.57
	443652	AJ080692	Hs.134229	ESTs, Weakly similar to I54401 hypertens	2.04	3.36
	448804	AW512213	Hs.342849	ADP-ribosylation factor-like 5	2.02	3.32
	443932	AW888222	Hs.9973	tensin	2.02	9.28
	421324	BE257515	Hs.103503	deoxyribonuclease Hlike 2	2.02	5.71
55	426406	AJ742501	Hs.169756	complement component 1, s subcomponent	2.01	5.49
	410669	AW805749		superoxide dismutase 2, mitochondrial	2.01	3.05
	446193	AI279390	Hs.144658	ESTs, Weakly similar to T17257 hypotheti	2.01	2.77
	400078			Eos Control	2.00	11.41
	456267	AI127958	Hs.83393	cystatin E/M	1.99	3.59
60	413125	BE244589	Hs.75207	glyoxalase I	1.98	6.70
	415433	W70067	Hs.58066	ESTs	1.98	5.59
	434699	AA643687	Hs.149425	Homo sapiens cDNA FLJ11980 fs, clone HE	1.98	3.52
	417553	L09190		trichohyalin	1.98	3.39
	403105			Target Exon	1.98	5.05
65	414081	AW969976		matrix Gla protein	1.97	8.74
	422639	AJ929377	Hs.173724	creatine kinase, brain	1.97	5.51
	452208	AA024792	Hs.31895	hypothetical protein MGC4093	1.97	5.67
	436106	AJ050715	Hs.2331	E2F transcription factor 5, p130-binding	1.97	5.75
	439265	AL134430	Hs.6906	Homo sapiens cDNA: FLJ23197 fs, clone R	1.96	5.09
70	430037	BE409649	Hs.227789	mitogen-activated protein kinase-activat	1.96	5.49
	440054	AW661947	Hs.6891	splicing factor, arginine/serine-rich 6	1.95	5.95
	417088	M54915	Hs.81170	pim-1 oncogene	1.95	8.19
	429451	BE409861	Hs.202833	heme oxygenase (decycling) 1	1.95	5.19
	415274	AF001548	Hs.78344	myosin, heavy polypeptide 11, smooth mus	1.95	6.78
75	452472	AW957300	Hs.294142	ESTs, Weakly similar to C55663 oligodend	1.94	5.98
	414860	BE255593	Hs.77502	methionine adenosyltransferase II, alpha	1.94	5.13
	437220	AL117542	Hs.334305	GS1999full	1.94	3.42
	450461	BE408081	Hs.46736	hypothetical protein FLJ23476	1.94	5.66
	424924	AL039103	Hs.153834	pumilio (Drosophila) homolog 1	1.93	5.28
80	413945	NM_000591	Hs.75627	CD14 antigen	1.93	5.38
	428193	NM_004235		Kruppel-like factor 4 (gut)	1.93	5.75
	415988	BE407713	Hs.78943	bleomycin hydrolase	1.92	4.65
	425783	AJ026740	Hs.1948	ribosomal protein S21	1.92	9.79
	431476	BE612705	Hs.256697	histidine triad nucleotide-binding prote	1.91	7.00

5	456653	AI807519	Hs.104520	Homo sapiens cDNA FLJ13694 fs, clone PL	1.91	3.41
	401846			NM_000588*Homo sapiens ribosomal protei	1.91	5.62
	428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin	1.90	4.00
	400199			Eos Control	1.89	15.74
	429367	AB007867	Hs.278311	plexin B1	1.88	5.58
	400083			Eos Control	1.88	9.07
	433465	AV657778	Hs.3314	selenoprotein P, plasma, 1	1.88	5.16
	400079			Eos Control	1.87	8.57
10	411807	AK000290	Hs.44033	dipeptidyl peptidase 8	1.86	5.19
	409178	BE393948	Hs.50915	kallikrein 5	1.85	2.75
	422624	BE616678	Hs.76152	KDEL (Lys-Asp-Glu-Leu) endoplasmic retic	1.85	5.33
	443121	Z19267	Hs.9006	VAMP (vesicle-associated membrane protei	1.85	6.01
	451092	AI207256	Hs.13766	Homo sapiens mRNA for FLJ00074 protein,	1.84	2.82
	430572	U33114	Hs.245188	tissue inhibitor of metalloproteinase 3	1.83	5.10
15	426812	AF105365	Hs.172613	solute carrier family 12 (potassium/chlo	1.83	6.48
	439927	AA854650	Hs.124597	ESTs	1.82	3.63
	415089	N25117	Hs.299465	ribosomal protein S26	1.82	6.69
	406400			kallikrein 8 (neurokinin/ovasin) (KLK8)	1.82	2.95
	406467			Target Exon	1.79	2.65
20	426672	AW270555	Hs.171774	hypothetical protein	1.79	5.24
	414088	AW797956	Hs.75748	proteasome (prosome, macropain) subunit,	1.78	6.02
	433271	BE621697	Hs.14317	nucleolar protein family A, member 3 (H/	1.78	5.92
	429307	AU076592	Hs.198951	jun B proto-oncogene	1.77	5.44
	433640	AW390125	Hs.240443	Homo sapiens cDNA: FLJ23538 fs, clone L	1.77	5.79
25	425503	W92517	Hs.158203	actin binding LIM protein 1	1.77	9.27
	429191	AF055215	Hs.198161	phospholipase A2, group IVB (cytosolic)	1.77	5.44
	425875	AU077333	Hs.160483	erythrocyte membrane protein band 7.2 (s	1.77	6.97
	431021	AI869664		thiosulfate sulfurtransferase (rhodanese	1.77	5.23
	432891	AF161483	Hs.279761	HSPC134 protein	1.75	5.73
30	432872	AI908984	Hs.279623	selenoprotein X, 1	1.75	5.72
	451335	AB023192	Hs.26285	imidazoline receptor candidate	1.75	6.87
	428975	NM_004672	Hs.194694	mitogen-activated protein kinase kinase	1.74	3.01
	417824	AA084798	Hs.82646	DnaJ (Hsp40) homolog, subfamily B, membe	1.74	5.75
35	439908	AI168031	Hs.155507	ESTs	1.74	2.63
	427349	AA360154	Hs.177415	Finkel-Biskis-Reilly murine sarcoma viru	1.74	6.80
	445919	T53519	Hs.334692	hypothetical protein MGC14141	1.74	5.65
	427391	W60675		hypothetical protein FLJ10350	1.73	6.13
	425299	AW505214	Hs.155560	cathepsin	1.73	5.88
40	430449	AA352723	Hs.241471	RN86	1.72	5.14
	456766	R87310	Hs.7740	oxysterol binding protein-like 1	1.71	4.35
	407694	U77594	Hs.37682	retinoic acid receptor responder (lazarro	1.71	6.16
	412374	X01388	Hs.73849	apolipoprotein C-III	1.70	5.18
	417483	BE549343	Hs.82208	acyl-Coenzyme A dehydrogenase, very long	1.70	7.46
45	410584	AB011112	Hs.64742	KIAA0540 protein	1.69	6.19
	431882	NM_001426	Hs.271977	engrailed homolog 1	1.68	2.63
	441379	AW175787	Hs.334841	selenium binding protein 1	1.67	7.42
	422115	AI878953	Hs.111811	microsomal glutathione S-transferase 3	1.67	6.93
	406742	AI468091	Hs.279860	tumor protein, translationally-controlle	1.66	6.26
50	432191	AA043193	Hs.273186	hypothetical protein, clone Telethon(lta	1.65	5.83
	452363	AI582743	Hs.94953	Homo sapiens, Similar to complement comp	1.65	7.54
	446623	AF279865	Hs.157111	kinesin family member 13B	1.65	5.36
	406712	M31212	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.65	12.30
55	400202			NM_002795*Homo sapiens proteasome (pros	1.64	5.70
	401429			C14001067:gi4126465(kb)BAA36581.1) (AB	1.64	3.82
	415166	NM_003652	Hs.78068	carboxypeptidase Z	1.62	5.95
	410169	AI373741	Hs.59384	hypothetical protein MGC3047	1.61	6.60
	406713	U02629	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.60	11.13
	453027	AI879341	Hs.539	ribosomal protein S29	1.60	10.97
60	416955	AW889150	Hs.80695	NM_004552*Homo sapiens NADH dehydrogena	1.60	5.90
	439053	BE244588	Hs.6456	chaperonin containing TCP1, subunit 2 (b	1.57	5.60
	400201			NM_006156*Homo sapiens neural precursor	1.57	5.32
	407049	X72632		NM_021724*Homo sapiens nuclear receptor	1.57	5.42
	430775	AI879186	Hs.250895	ribosomal protein L34	1.57	7.09
65	427380	NM_005534	Hs.177559	interferon gamma receptor 2 (interferon	1.56	5.37
	407143	C14076	Hs.332329	EST	1.56	6.54
	435127	W94824	Hs.11565	RIKEN cDNA 2010100O12 gene	1.56	6.35
	413659	BE155647		gb:PM2-HT0353-130100-002-e09 HT0353 Homo	1.55	5.96
	445624	AW140103	Hs.78880	livB (bacterial acetolactate synthase)-I	1.55	4.09
70	435044	NM_002802	Hs.4745	proteasome (prosome, macropain) 26S subu	1.55	5.71
	410397	AF217517	Hs.63042	OKFZp56AJ157 protein	1.54	5.14
	429071	AW794126	Hs.195453	ribosomal protein S27 (metalloproteinstimu	1.54	8.70
	412915	AW087727	Hs.74823	NM_004541:Homo sapiens NADH dehydrogenas	1.54	6.57
	446429	AI681807	Hs.201391	ESTs	1.53	2.87
	414551	AI815639	Hs.76394	enoyl Coenzyme A hydratase, short chain,	1.53	6.07
75	406801	AW242054	Hs.190813	ribosomal protein L9	1.52	5.63
	437895	AB014568	Hs.5898	KIAA0668 protein	1.51	5.74
	413929	BE501689	Hs.75617	collagen, type IV, alpha 2	1.51	6.40
	425456	T70445	Hs.157850	ribosomal protein L9	1.51	7.08
80	409635	Z37166	Hs.55296	HLA-B associated transcript-1	1.50	5.26
	404467			Target Exon	1.50	5.82
	406743	AA911568	Hs.279860	tumor protein, translationally-controlle	1.50	5.25
	454098	W27953	Hs.292911	Pitkophin	1.48	3.14
	429205	AI492393	Hs.198248	UDP-Gal:beta-GlcNAc beta 1,4-galactosyl	1.48	6.24

5	413825	BE299181	Hs.75564	CD151 antigen	1.47	5.64
	421143	AB024536	Hs.102171	immunoglobulin superfamily containing le	1.45	6.19
	440254	AI879332	Hs.7101	anaphase-promoting complex subunit 5	1.45	5.50
	408711	N25514	Hs.77385	myosin, light polypeptide 6, alkali, smo	1.42	11.24
	423513	AF035960	Hs.129719	transglutaminase 5	1.42	3.18
	406896	D00159		gb.Homo sapiens gene for pancreatic elas	1.41	6.92
	433453	BE548307	Hs.3297	ribosomal protein S27a	1.40	5.38
	406800	AA505535		gb.mh84h10.s1 NCL_CGAP_Br1.1 Homo sapien	1.37	5.51
	421748	NM_014718	Hs.107809	KIAA0726 gene product	1.37	5.46
10	424372	AW952803	Hs.21732	Homo sapiens cDNA FLJ11780 fs, clone HE	1.36	4.06
	408250	R92918	Hs.19597	KIAA1694 protein	1.27	2.74
	431931	AB035302	Hs.272212	cadherin 9, type 2 (T1-cadherin)	1.15	2.65
	405587			C15000544::gij5454148[ref]NP_006368.1 U	1.06	3.11
15	409574	AW419080	Hs.250645	ESTs	1.00	3.60
	404175			Target Exon	1.00	3.08
	452640	AA027115	Hs.100206	ESTs, Weakly similar to A53856 aryl-acyl	1.00	2.82
	443564	AI921685	Hs.199713	ESTs	1.00	2.51
20	TABLE 65B:					
	Play:	Unique Eos probeset identifier number				
	CAT number:	Gene cluster number				
	Accession:	Genbank accession numbers				
25	Play	CAT Number	Accession			
	407328	534268_1	AI673735 AA978066			
	427890	1373988_1	AA417099 AA435761 AA972917 AI660387			
	444207	9172_3	BE739425 AA514221 AA865491 AI828293 AA470456 AI276739 AA169357 BE932464 AA514889 AW819039 AW819083 BE843048 AI432496 AI4703325			
30			AI247243 BG533994 AA513783 AI887309 AA528036 AW972006 AW873028 AI924914 AI818810 AW152378 AW084945 AI521413 AI669583 BE932521			
			AI581370 BE180238 AW089750 AW771461 AW089714 AI590949 AI819148 AA731056 BF815234 BF911506 AA235803 AA485373 AI735658			
			AW393133 AW073080 AI707637 BF353320 BE843111 AW819036 AW393135 BG697291 AV648670 AV654332 AV687530 BG566964 AI807430			
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			BG678060 AI565004 AW819026 BE843092 AV686437 AV723049 BG616948 AI911647 AI743490 AI091096 BE857251 AI962074 AA040027 AW769317			
			AA343477 AA640112 BF876213 R82948 H26425 H82876 BE843095 BE843140 BG536641 BG617830 AA235802 BE774985 BE006682 BF342375			
35			AA903144 BF338083 BF984258 AV657996 AI749532 BE768614 BE857252 BE932516 BE768573 AV657993 AV657777 AV752631 BE774974 T55847			
			BF095761 BF911511 BE710793 BE180119 BG617338 H45942 T55897 AV657718 BG563497			
	407102	7177_2	AW945170 BF930905 F33652 BG057818 AI368018 AI421485 AI300352 AI378525 AI264177 AI276281 AI245302 AI281050 AI190036 AW451438			
			AW242903 AA910870 F22289 F19647 F22375 AW473816 BF445785 AA774528 F33447 C01077 AW772227 F17759 H42812 R09701 AA349096			
40			R48772 H42892 H42537 R47898 N28263 H25721 F32386 H43971 R48205 F21390 H45809 AA007629 R47897 R83734 H45844 AW983653 H43970			
			H42536 H42495 R48875 H42961 H22079 R86018			
	437596	2875_1	BC022398 AV743635 AW976922 AW152652 AA910013 AA834629 BG536317 AW849807 AV713062 AI684337 BE044081 AA761490			
	440116	454673_1	R69942 BG655457 BF111453 AI149320 N23160 AI446431 AI758316 AV741781 BI791950 BM055014 AI798851 AA865357 AI417230 N67277 T55592			
			T52179			
45	443072	449628_1	AV734838 AI937532 AI032318 AW749500 AA091720			
	442679	31783_3	BG621493 BI056706 BG496376 R53718 W65356 R79357 BG434247 AA357769 AW978686 BG573200 BF132113 BF086709 AA366938 D79234			
			BG494628 AA156754 BG434311 AW978686 AW273417 BM054662 AI799886 AI433351 AI160798 AI433742 BF056186 AI281606 AW015046 AI439585			
			AI245530 AI078257 AA807170 AA837395 W61252 AA831085 AA287371 AW768354 AA890606 AI302539 AI708575 AI673031 AI242260 AW514069			
			AA283958 AA825452 AI371234 AA425686 AA453422 AA827697 R23653 D20240 AA772517 H13802 R66972 R79360 R27351 F03379 AA031952			
			N69504 R33143 R79358 R39136 R38800 R15089 R52937 R37502 H01021 R33634 R46551 Z40404 BG291052 BG570357 AW931046 BG496872			
50			H23558			
	424571	9758_1	BE379766 AW152643 AI803450 AI564343 AI092711 AI140525 AW152156 AI620740 AI554689 AI161209 AI290242 AI339745 AI374611 AI347388			
			AI858296 AI140529 AI366124 AA493912 AA406235 AA493889 AI057160 AW022264 AI097277 AI144126 AI080051 AA983529 AA860507 N53469			
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			AJ375272 AW571777 AI359198 AA993793 BE614394 BE738239 AA127883 AI034344 T59504 D81608 AA908704 AW051665 AA382785 AA307208			
55			N24639 AI370715 BE244980 AA458596 AW449675 AI191008 BF223749 N70752 N22266 AI191012 AA028001 AI49106 BF215661 BF5931548			
			BG942356 AI474968 BE858217 BF793358 AV756758 BG483603 AI093724 BF693395 BG545345 AI744294 T59549 AA811773 BG499757			
	420787	55832_7	BE674920 AA564248 AA280309			
	456332	21353_10	BG740624 AV720262 BG198346 BG215119 AW841716 AA228357 AW841785			
60	418479	175360_1	BG740624 AV720262 BG198346 BG215119 AW841716 AA228357 AW841785			
			BF966791 BG564455 BE672212 AI151416 AI566231 AI417585 AI378391 AA236264 AI337574 AI346166 AA406590 AA748618 AW771957 AA478626			
			AW338072 AI889444 AI810315 BE503662 BG231886 AI888230 AI289102 BF594638 AW074094 AW512456 AA832229 AI056108 AI025868 AI245806			
			D61957 AI093841 AI721013 AI597594 AA993022 AI128620 AI295106 W37459 W35410 N90037 AA890323 R39943 AI458741 AA829976 AA479201			
			AI539018 AA875875 AA448827 AW779493 Z39056 H84925 AA223923 AW517592 AI804400 AA911882 BM353143 D62885 AI457883 AI880626			
	431628	30288_1	R31694 RA2772 R68804 R44147 R71463 AV742540 BF966987			
65			AF146277 NM_012120 AF164377 AW976054 AW662923 AW770101 AI597184 AA713959 AA808021 AW444640 AI081519 AI050105 AW958324			
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			AA847195 AI418480 BM353163 AI015673 AI357621 AI374592 AI245029 AI580659 AI370154 AA767503 AA643885 BM091307 BG496655 AW364502			
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			BI086785 BG190411 BG217933 BG219447 BF886143 BG403278			
70			AL049987 BG620667 BG571984 AW362842 BE150456 BE326465 AW872412 AA868553 AI024689 AA442638 AA813604 AA442648 AA663108			
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			AJ354470 BE466760 AI827987 AI005467 AA833517 AA563934 AA522837 AA812876 AW020895 AA600372 AA663178 AI187977 AA229164 AW270324			
			AA703066 T78981 AA532985 BE708493 R11132 AI253986 AI916737 T84796 T84294 AW961515 AI459289 BF109829 BI491853 AI084517 AW103830			
			BE835233 AI472712 AV741009 AA551512 H28268 AA436880 AA447794 BE835410 BE835385 BE818352 BE818350 R64648 BE646467 AA493776			
75			AA437299 BE818343 R99914 R1089 BF576826 AU186065 BF802058 AI217018 AA247541 AI191725 BE766618			
	454947	1083824_1	AW846590 AW846615 AW846584 AW846592 AW846621 AW846610			
	438962	195763_1	AI207343 BF813684 BF928775 AA828585			
80	431693	1414_4	AB075855 AI799883 AI952039 BM313847 AW167132 AW264027 AI394192 BM272158 BM272359 BG057287 BE464852 AI620722 BE046016			
			AI758979 AW474705 AW474624 AW440580 AI289435 AW002172 AI458169 AI634183 AI125609 AI951377 AI631154 AI453490 AI857358 AI469756			
			BG683503 AI434048 F09546 AW518770 BF855622 AI659151 AA985193 AI814412 AW298184 H09775 AI869379 AW207026 AI639678 AI826075			
			BF940660 AA744971 C00469 AI672560 AL045697 BF847489 BF842860 T65400 AI863491 H24845 T54772 BE090906 BE090917 BE090877 AA152255			
			BE244301 BI038346 BI038045 W94876 AA093121 BI253346 AW470130 N92723 AA258877 R62397 BI523168			



450515	13638_2	BE299605 AI589870 AA847598 AI470122 BF933896 AI304356 BE223045 BF435800 AI394207 AI708171 AW025415 AI079409 AW008420 AW304226 N34543 AW603578 AA526961 AA983631 N99134 AA626645 R45023 AA902417 AW672925 AA449885 AA953982 AW675471 AA010062 N80194 H14620 H28475 H26247 BF333581 AW842369 H06848 H05508 H81745 H15016 R51905 AA860423 AI860904 AA876023 AF119900 NM_018539 AA702388 N53043 BF351064 N70103 AI207469 AA551569 AW383189 W00906 W00935 N54252 B0015871 AI521618 AI471709 AW169230 BG539605 B1058963 B1058949 BG548398 BG952412 AW842037 AW842040 AW890573 AK054673 D16294 NM_006111 BC001918 B1758758 AU125294 AU121192 AU118572 AL517117 BE793982 B1826721 AW149620 BG721751 B1916889 BE795064 AI934471 BF435179 BE797475 BG744432 BF733017 B1261710 BF435252 BE267474 BE219495 AV653212 AW248975 B1832737 BE264857 BE386198 AA773811 AI826904 BF732388 AI281977 BF732958 BF434612 AA480572 BF724595 AA058529 BG500189 AV687020 AA934427 AV696822 BG674590 B1262247 BE748762 BG568892 BG180336 BE748454 BG876983 BE222517 W61060 BG993321 BG742061 BG696266 BG740805 BG685898 AA031863 AF005747 AA129619 BG745080 H29767 AA011078 T88743 BG216950 AI808941 AW166202 AA522692 AI927649 AW237367 AI935538 AI689743 AW966083 BE326704 AU147054 AW129250 BE463425 AU148980 AI242161 AW615658 AU145096 BE465120 AU159062 AI679419 AW473145 BG236394 AI292110 AI985496 AA995857 BE551066 AI632625 AW511387 AI080003 AW243240 AI640340 AI075293 AW205957 AI679929 AI681080 AI753324 BF593137 AW337148 BE326667 AI537787 AI659936 F22148 AI332985 AI650925 AW248532 BE048931 F30242 AI524808 BE939885 AI340251 AI962198 BE463831 AI347479 BE221712 AW193412 BF434502 BE939895 AI373314 AW270842 AW024782 AI272109 AW772225 AW052130 F36818 AW269249 AW638580 AL565549 AI927017 AI821667 AI796037 AW772479 AA995455 AA470517 R00503 AI765977 BF196432 AW341091 AL517116 BG683620 F26241 AI180675 AU160539 BG876391 BF083008 AI795938 BF739968 AI001107 AI985556 BE792113 B1760879 BG545253 BE313692 AI393338 BF195296 AA325295 BE258769 AA160087 AA781222 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55	406997	29867_1	
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75	442987	66995_1	
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5	431021	10409_1	NM_003312 BC010148 AK000862 D87292 BG709214 BF972766 BG740474 B1771592 B1159859 B1820468 B1523933 A1889664 AA314620 BF724353 BG194276 BG195282 B1524679 BF435589 A1300546 AA481682 AW780207 A1800832 A1380540 BE222877 AW300707 AA481445 AW015893 A1381541 AA768558 A1138798 AA432063 AA948713 A1869485 A1307419 A1336589 A1301672 BF055581 A1312785 A1521208 A1927918 A1989759 M78015 BF718621 A1927654 A1795909 A1335381 BF334524 AW007444 AA706797 AA975178 AA884739 AA443837 AA933897 A1826464 A1271737 AA053419 H79704 A1984483 BG952614 BF345358 AW083336 AA643660 A478232 AA603071 BE714413 AW078660 AW070418 R02364 BG925951 AL566823 AA053459 AA446748 BG954446 BF760569	
10	427391	9048_3	AY007099 AU150467 A127583 BE735800 A1125772 A1373009 A1215670 A1769136 AA586848 AW451158 N50799 AA936337 A1355427 BE677905 AW338020 BG151557 AA657954 A1754947 AW467279 A1128755 BF448136 A1369247 BF439175 BE207948 A1089272 B911455 AA420720 F36980 A194204 AA953319 AA155753 A1052675 AA044804 A1282678 BG741226 F25798 AA180204 A1682613 A1152630 AA420766 A1373393 A1885767 T03896 BF939430 AA974325 AW072996 AW005963 BG252471 A1192002 A1818908 AA776144 B1834864 A1753954 BE908511 AW628731 AA034958 BF447074 AW194649 A1915192 AL567164 BF691569 AL565970 AW471137 AW276992 AL536717 BF591783 A1571746 BF939172 BG745029 BG575588 H054960 H51485 AW799491 A1370437 H26413 AA585334 AU151276 AA074274 AA936883 AW131643 A1221650 AW105476 AW952294 H23835 B1035010 F22360 BF849322	
15	400202	11771_2	BE873890 BF745945 AA156007 AA573157 AW874610 AA916387 N75963 BM063306 AW044671 BC013008 NM_002795 D26598 BG118716 B1910891 BF972860 BG119842 B1094093 AL538757 BE271653 B1856538 BE909573 BG109826 BE784430 BE899255 B1833973 BM010809 BE621321 BG684956 BE904726 B1871370 AV708990 BF971483 BE298241 B1197007 BE272092 BG120374 AW963509 BE540572 AV744947 BG943041 AW327463 BG472870 BE33697 N28533 A1316042 N42043 AW404246 AW892094 AA379896 AW801110 AW406977 AA379791 BG941889 BE076254 AA360459 AA379385 AA320056 BG942618 D31230 AA308300 AA360371 AA371733 AA732937 AA494241 W32225 BF745937 A1383690 BG202360 NM_006156 D23662 BF038871 B1670321 B1603145 B1666956 BG716628 BG707476 BG768814 BE312007 BF125930 BF037916 BG942671 A1752472 AW009362 BE379126 B1198555 BF126026 N28289 BE388301 BG327102 A1571450 BF038400 A1884649 A1718962 A1742314 AA977058 A1150699 BG944784 AA187402 BG283893 AV712007 W01301 BG774109 W77840 C15672 B1670016 A1752473 AA484409 C14921 N41745 C15220 F30164 AA133181 BF768974 H30334 AA034968 AA384232 AA353297 AW407023 AA337516 F36177 AA374444 AA402758 A1141545 B1021470 AA973914 BE155647 BE156627 AA505535	
20	400201	24179_2		
25	413659	1526081_1		
	406800	0_0		
30	TABLE 65C:			
	Pkey:	Unique number corresponding to an Eos probeset		
	Ref:	Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA		
		sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:483-495.		
	Strand:	Indicates DNA strand from which exons were predicted.		
35	NL_position:	Indicates nucleotide positions of predicted exons.		
	Pkey	Ref	Strand	
	405121	8102330	Minus	
	401203	9743387	Minus	
40	400494	9714719	Plus	
	402294	2282012	Minus	
	404730	8389582	Plus	
	403593	6862650	Minus	
45	403710	6437516	Plus	
	401905	8671966	Plus	
	403108	8980955	Plus	
	404996	6007890	Plus	
	402315	7381741	Minus	
50	401131	8699812	Minus	
	401205	9743388	Plus	
	403105	8980016	Minus	
	401846	7712190	Minus	
	406400	9256298	Plus	
55	406467	9795551	Plus	
	401429	8217890	Minus	
	404467	8077630	Minus	
	406587	8189273	Minus	
60	404175	9931117	Minus	
	TABLE 66A. DISEASE INDICATIONS AND PREFERRED UTILITIES FOR SELECTED GENES			
	Table 66A provides disease indications and preferred utilities for about 439 selected genes. These genes were identified using Eos/Allymetrix Genechip arrays.			
	Primekey:	Unique Eos probeset identifier number		
	ExAcct:	Exemplar Accession number		
65	UgID:	Unigene ID number		
	UgTitle:	Unigene title		
	Disease:	diseases indicated for selected gene as described in table 1 and abbreviated as follows: AWPC (androgen independent prostate diseases), arth (arthritis diseases), bph (benign prostatic hyperplasia), blad (bladder diseases), angio (blood vessel diseases), EWS (bone diseases), glio (brain diseases), breast (breast diseases), cerv (cervical diseases), colon (colorectal diseases), esoph (esophageal diseases), fibro (fibrotic diseases), headnk (head & neck diseases), leio (leiomyoma diseases), leuk (leukocyte diseases), hepC (liver diseases), lung (lung diseases), ovar (ovarian diseases), endo (ovarian endometrioid diseases), omuc (ovarian mucinous diseases), panc (pancreatic diseases), pros (prostate diseases), renal (renal diseases), mela (skin diseases), stom (stomach diseases), test (testicular diseases), uter (uterine diseases)		
70	Utility:	preferred utilities for selected gene as described in the text and abbreviated as follows: CTL (DNA vaccine target), diag (diagnostic or prognostic target), mAb (monoclonal antibody target), s.m. (small molecule target)		
75	Primekey	Ex Acct	UgID	
	400289	X07820	HS.2258	
	400297	A1127076	HS.306201	
80	400303	AA242758	HS.79136	
	400843			
	402075			
	402901			
	404287			
	Ug Title	Disease		
	matrix metalloproteinase 10 (stromelysin)	angio, blad, lung, cerv, ovar, headnk, esoph		
	hypothetical protein DKFZp564O1278	breast, blad, colon, pros		
	UV-1 protein, estrogen regulated	breast, ovar, pros, stom, uter, blad, lung, headnk		
	NM_003105~Homo sapiens sortilin-related	blad		
	ENSP00000251056~Plasma membrane calcium	blad, lung, headnk, cerv, mela, esoph		
	NM_025206~Homo sapiens hypothetical pro	blad		
	FGENESH predicted novel CUB-domain conta	panc, lung, colon, uter, esoph		
	Utility	mAb+diag+s.m.		
		mAb		
		mAb		
		s.m.		
		mAb+diag		
		CTL		
		mAb+s.m.		

5	404682		ortholog of mouse polydomain protein	panc	diag
	404875		NM_022819: Homo sapiens phospholipase A2	blad	CTL+s.m.
	404977		Insulin-like growth factor 2 (somatomedi	blad, ovar	mAb+diag
	405033		C1002652: gq544327[sp]004799:FMO5_RABIT	blad	s.m.
	405547		NM_018833: Homo sapiens transporter 2, A	cerv, meta	mAb+s.m.
	406400		kallikrein 8 (neuropsin/ovasin) (KLK8)	ovar, uter	diag
	406964	M21305	FGFENES predicted novel secreted protein	angio, blad, fibro	diag
	407603	AW955705	Hs.52604	glio, blad	CTL
	407792	AJ077715	Hs.39384	ovar, cerv, panc	mAb+diag
10	407811	AW190902	Hs.40098	blad, panc, stom, uter, lung, esoph	diag
	407836	T79340	Hs.22575	angio	CTL
	407975	X89426	Hs.41716	angio, renal	diag
	408243	Y00787	Hs.624	blad, stom, headnk, cerv, lung, angio, esoph, panc	diag
	408367	AK001178	Hs.44424	mela	mAb+s.m.
15	408369	R38438	Hs.118747	pros, lung, fibro, uter, glio, cerv, ovar	mAb
	408380	AF123050	Hs.44532	lung, blad, headnk, panc, stom, fibro, esoph, mela	CTL
	408482	NM_000676	Hs.45743	lung, esoph, headnk	mAb+s.m.
	408562	A436323	Hs.31141	uter, fibro	mAb+s.m.
20	408790	AW580227	Hs.47860	lung	s.m.
	408908	BE296227	Hs.250822	blad, lung, headnk, stom	CTL+diag
	409041	AB033025	Hs.50081	uter, ovar, lung, colon, stom, headnk, breast, panc	mAb+s.m.
	409079	W87707	Hs.82065	breast, pros	CTL
	409103	AF251237	Hs.112208	lung	diag
	409178	BE393948	Hs.50915	ovar, breast, mela	mAb+s.m.
25	409220	BE243323	Hs.51233	angio, renal, colon, stom	mAb+s.m.+CTL
	409348	AJ401535	Hs.146090	renal, glio	mAb+diag
	409389	AB007979	Hs.301281	glio	diag
	409420	Z15008	Hs.54451	lung, headnk, panc, stom, cerv, esoph, blad	mAb+s.m.+CTL
30	409632	W74001	Hs.55279	lung, blad, headnk	CTL
	409637	AA323948	Hs.55407	renal	mAb+s.m.
	409663	AJ743750	Hs.98306	renal	diag
	409745	AA077391		ovar, renal	CTL+s.m.
	409757	NM_001898	Hs.123114	panc, stom, lung, blad	diag
35	409893	AW247090	Hs.57101	lung, cerv, blad, test, esoph	diag
	409956	AW103364	Hs.727	breast, panc, ovar, colon, headnk, lung, blad, esoph	diag
	410001	AB041036	Hs.57771	ovar, pros, uter, cerv, lung	s.m.
	410055	AJ250839	Hs.58241	renal	CTL
	410153	BE311926	Hs.15830	renal, blad	CTL
40	410274	AA381807	Hs.61762	lung, renal	s.m.
	410309	BE043077	Hs.278153	panc	mAb+s.m.
	410407	X66839	Hs.63287	renal, lung, colon, stom, ovar, uter, blad	mAb+diag+s.m.
	410418	D31382	Hs.63325	colon, blad, lung, ovar, panc, headnk	diag
	411274	NM_002776	Hs.69423	colon, ovar, uter, cerv, headnk, panc	mAb+s.m.
45	411411	AA345241	Hs.55950	renal	diag
	411773	NM_006799	Hs.72026	ovar	CTL
	412078	X69699	Hs.73149	ovar	s.m.
	412140	AA219691	Hs.73625	lung, blad, headnk, breast, ovar, panc, angio, test, mela	mAb+s.m.+CTL
	412580	AA113262	Hs.17901	mela	s.m.
50	412609	Z48804	Hs.74124	mela	diag
	412628	AB972402	Hs.306051	pros	mAb+s.m.
	412709	AL022327	Hs.74518	glio	s.m.
	412719	AW016610	Hs.816	lung, headnk, blad, glio, cerv	CTL+s.m.
	412959	O87458	Hs.75090	glio	mAb+s.m.
55	412986	X81120	Hs.75110	fibro, panc	mAb
	413048	M93221	Hs.75182	glio, ovar, blad, lung	diag
	413063	AL035737	Hs.75184	panc, lung, blad, breast, cerv, ovar, headnk, esoph, mela, stom	CTL+s.m.
	413278	BE563085	Hs.833	blad	diag
	413324	V00571	Hs.75294	blad, lung, mela, fibro, uter	s.m.
60	413385	M34455	Hs.840	panc, glio	diag
	413554	AA319146	Hs.75426	panc, lung, headnk, cerv, colon, uter, stom, esoph	diag
	413719	BE439580	Hs.75498	angio	CTL+diag
	414577	AJ056548	Hs.72116	lung, blad, headnk, panc, stom, ovar, esoph	diag
	414774	X02419	Hs.77274	breast, blad, lung, fibro, panc, colon, headnk,	
65	414812	X72755	Hs.77367	cerv, stom, renal, ovar, test, mela, esoph	diag
	414825	X06370	Hs.77432	glio, lung, renal, esoph, panc, headnk, arth	mAb+s.m.+CTL
	414883	AA926960	Hs.348669	lung, ovar, stom, colon, cerv, headnk, test	s.m.
	414907	X90725	Hs.77597	blad, lung, ovar, test	mAb+s.m.
70	414945	BE076358	Hs.77667	mela	CTL+diag
	415138	C18356	Hs.295944	angio, panc, stom, lung, uter	mAb+s.m.+CTL
	415511	AJ732617	Hs.182362	blad, ovar, renal	mAb+s.m.
	415539	AJ733881	Hs.72472	breast, uter, pros	diag
	415668	AW957684	Hs.306814	mela	mAb+diag+s.m.
75	415669	NM_005025	Hs.78589	lung	mAb+s.m.
	415817	U88987	Hs.78867	lung, glio, headnk, cerv, mela, esoph, fibro	mAb+s.m.
	415910	U20350	Hs.78913	glio	mAb
	415929	AA724373	Hs.304950	mela	mAb+s.m.+CTL
	415989	AJ267700	Hs.351201	pros, ovar, blad, lung, headnk, panc, colon, stom	CTL+diag
80	416091	AF295370	Hs.283082	headnk, esoph, mela	CTL+s.m.
	416209	AA236776	Hs.79078	lung, headnk, colon, uter, stom	mAb+s.m.
	416250	AA581386	Hs.73452	esoph, lung, cerv, ovar	CTL
	416350	AF188625	Hs.189507	test, mela, fibro	diag
	416530	U62801	Hs.79361	ovar, uter	

	416636	N32536	Hs.42645	solute carrier family 16 (monocarboxylic	breast, panc, uter, mela	mAb+s.m.
	416658	U03272	Hs.79432	fibrillin 2 (congenital contractural ara	lung, ovar, uter, blad, angio, test	diag
	416836	Q54745	Hs.80247	cholecystokinin	pros, EWS, glio	diag
5	416857	AA188775	Hs.292453	FGENESH predicted TM containing protein	glio	mAb+s.m.
	417034	NM_006163	Hs.80962	neurotensin	lung, headnk, cerv	diag
	417079	U65590	Hs.81134	interleukin 1 receptor antagonist	blad, lung, headnk, cerv, esoph	diag
	417166	AA431323	Hs.42146	Paired box protein Pax-3	mela	CTL
	417355	O13168	Hs.82002	endothelin receptor type B	glio, mela	mAb+s.m.
10	417389	BE260964	Hs.82045	midkine (neurite growth-promoting factor	ovar, lung, blad, uter, cerv, panc, stom, mela, test, colon	mAb+diag
	417433	BE270266	Hs.82128	5T4 oncofetal trophoblast glycoprotein	panc, breast, blad, lung, headnk, cerv, uter, ovar, stom, renal	mAb
	417542	J04129	Hs.82269	progestagen-associated endometrial prote	lung, mela	mAb+diag
	417771	AA804658	Hs.82547	retinoic acid receptor responder (tazaro	blad, cerv, panc, ovar	mAb
	417866	AW067903	Hs.82772	collagen, type XI, alpha 1	lung, panc, breast, ovar, headnk, stom	CTL
15	417931	W95642	Hs.82961	trefol factor 3 (intestinal)	ovar, panc, stom, colon, uter, pros	diag
	417933	X02308	Hs.82962	thymidylate synthetase	blad, lung, angio, colon, panc, esoph	s.m.
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	lung, blad, fibro, headnk, panc, stom, colon, ovar, esoph, mela	mAb+diag+s.m.
	418030	BE207573	Hs.83321	neuromedin B	glio, panc	diag
	418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	mela	CTL+diag
20	418281	U09550	Hs.1154	oviductal glycoprotein 1, 120kD (mucin 9	uter, ovar	s.m.
	418478	U38945	Hs.1174	cyclin-dependent kinase inhibitor 2A (me	lung, blad, ovar, headnk, panc, cerv, mela	mAb+diag
	418506	AA084248	Hs.372651	Unknown protein for MGC-29643 (formerly	lung, blad, renal, panc, stom, colon, ovar	mAb+s.m.
	418526	BE019020	Hs.85638	solute carrier family 16 (monocarboxylic	esoph, headnk	s.m.
	418558	AW082266	Hs.86131	Fas (TNFRSF6)-associated via death domain	lung, blad, stom, ovar, panc, esoph, cerv, mela	CTL
25	418678	NM_001327	Hs.167379	cancer/testis antigen (NY-ESO-1)	lung	CTL
	418830	BE513731	Hs.88959	hypothetical protein MGCA816	blad	s.m.
	418867	D31771	Hs.89404	msh (Drosophila) homeo box homolog 2	leuk, ovar, breast, blad, renal	mAb+s.m.
	418870	AF147204	Hs.89414	chemokine (C-X-C motif), receptor 4 (fus	renal, uter, lung	CTL
	419080	AW150835	Hs.18878	hypothetical protein FLJ21620	lung, esoph, headnk, blad	diag
30	419121	AA374372	Hs.89626	parathyroid hormone-like hormone	lung	mAb+s.m.
	419171	NM_002846	Hs.89655	protein tyrosine phosphatase, receptor I	angio, renal	mAb+s.m.
	419172	AW338625	Hs.22026	ESTs; similar to TRANSMEMBRANE 4 SUPERF	blad, lung, headnk, panc	CTL+s.m.
	419183	U06069	Hs.89663	cytochrome P450, subfamily XXIV (vitamin	panc, lung, stom, cerv, pros, headnk, esoph	diag
	419216	AU076718	Hs.164021	small inducible cytokine subfamily B (Cy	panc, fibro, headnk, lung	mAb+diag
35	419235	AW470411	Hs.288433	neurotrophin	ovar, pros, lung, breast, uter, test, panc, stom	mAb+s.m.
	419452	U33635	Hs.90572	PTK7 protein tyrosine kinase 7	glio, omuc, stom, lung, panc, colon, renal, uter	mAb+diag
	419508	AW97938	Hs.90786	ATP-binding cassette, sub-family C (CFTR	lung, fibro, test	CTL+s.m.
	419556	U29615	Hs.91093	chitinase 1 (chitotriosidase)	glio	mAb+diag
	419704	AA429104	Hs.45057	ESTs	glio	CTL+s.m.
40	419723	AL120193	Hs.339810	longevity assurance (LAG1, S. cerevisiae	blad, lung, colon, ovar, test, esoph, mela	CTL+s.m.
	419741	NM_007019	Hs.93002	ubiquitin carrier protein E2-C	blad, stom	mAb
	420159	AI572490	Hs.99785	Homo sapiens cDNA: FLJ21245 fs, clone C	lung, mela	s.m.
	420162	BE378432	Hs.95577	cyclin-dependent kinase 4	mela	CTL
	420208	BE276055	Hs.95972	silver (mouse homolog) like	blad	mAb
45	420370	Y13645	Hs.97234	uroplakin 2	ovar, uter, cerv	diag
	420440	NM_002407	Hs.97644	mammaglobin 2	headnk, glio, cerv, mela	CTL+s.m.
	420602	AF080877	Hs.99236	regulator of G-protein signalling 20	uter, endo, lung	CTL
	420610	AI683183	Hs.99348	distal-less homeo box 5	renal	mAb+s.m.
	420737	L08096	Hs.99899	CD70; tumor necrosis factor (ligand) s	renal	mAb+s.m.+CTL
50	420789	AI670057	Hs.199882	ESTs	panc, blad	s.m.
	420876	AA918425	Hs.177744	FGENES predicted novel protein containin	blad, lung	CTL+s.m.
	421066	AU076725	Hs.101408	branched chain aminotransferase 2, mito	blad, panc, stom, lung, fibro, ovar, esoph	diag
	421110	AJ250717	Hs.1355	cathepsin E	angio, panc, stom	diag
	421340	F07783	Hs.1369	decay accelerating factor for complement	breast, panc, headnk, lung, stom, blad, cerv, colon, fibro, test, mela, esoph	diag
55	421379	Y15221	Hs.103882	small inducible cytokine subfamily B (Cy	renal	mAb+s.m.
	421471	U90545	Hs.327179	solute carrier family 17 (sodium phospho	lung	mAb+s.m.
	421474	U76362	Hs.104637	solute carrier family 1 (glutamate trans	blad, esoph, lung, mela	mAb+s.m.+CTL
	421508	NM_004833	Hs.105115	absent in melanoma 2	breast	mAb+s.m.
	421524	AA312082	Hs.105445	GDNF family receptor alpha 1	breast, ovar, panc, cerv, uter, pros, lung, stom, headnk	diag
60	421552	AF026692	Hs.105700	secreted frizzled-related protein 4	headnk, lung	CTL+diag
	421574	AJ000152	Hs.105924	defensin, beta 2	breast, panc, lung, omuc	diag
	421582	AI910275	Hs.350470	trefol factor 1 (breast cancer, estroge	mela	mAb+diag
	421666	AL035250	Hs.1408	endothelin 3	lung	mAb+s.m.
	421753	BE314828	Hs.107911	ATP-binding cassette, sub-family B (MDR/	lung, cerv, headnk, blad	mAb+s.m.
65	421817	AF145074	Hs.108660	ATP-binding cassette, sub-family C (CFTR	glio	mAb+s.m.
	422033	AW245805	Hs.110903	claudin 5 (transmembrane protein delete	panc, pros	diag
	422048	NM_012445	Hs.288126	spodoin 2, extracellular matrix protein	panc, lung, colon, fibro	diag
	422109	S73265	Hs.1473	gastrin-releasing peptide	headnk, blad, lung, cerv, stom, esoph	diag
	422158	L10343	Hs.112341	protease inhibitor 3, skin-derived (SKAL	colon, breast, fibro	mAb+s.m.
70	422163	AF027208	Hs.112360	prominin (mouse)-like 1	mela	s.m.
	422192	AA305159	Hs.113019	fts485	colon, omuc, stom, panc	mAb+diag
	422260	AA315993	Hs.105484	regenerating gene type IV	blad, lung, headnk, renal	diag
	422282	AF019225	Hs.114309	apolipoprotein L	lung, blad, test, cerv, headnk, esoph	s.m.
	422283	AW411307	Hs.114311	CDC45 (cell division cycle 45, S.cerevis	mela	mAb+s.m.+CTL
75	422309	U79745	Hs.114924	solute carrier family 16 (monocarboxylic	panc, colon, blad	mAb+diag
	422330	O30783	Hs.115263	epiregulin	panc, stom, colon, esoph, renal, blad	CTL+s.m.
	422397	AJ223366	Hs.116051	MYEOV Myeloma overexpressed gene (in a s	blad, panc, pros, angio, colon, stom, lung, mela	diag
	422424	AI186431	Hs.296638	prostate differentiation factor	colon, renal	mAb+diag
	422627	BE336857	Hs.118787	transforming growth factor, beta-induced	lung, blad	s.m.
80	422765	AW409701	Hs.1578	baculoviral IAP repeat-containing 5 (sur	blad, cer, lung, uter, angio, stom, test	s.m.
	422809	AK001379	Hs.121028	hypothetical protein FLJ10549	breast, ovar, pros, panc, lung, colon, uter	diag
	422867	L32137	Hs.1584	cartilage oligomeric matrix protein (pse	ovar, blad, panc, lung, headnk, colon, stom	CTL+s.m.
	422956	BE545072	Hs.122579	ECT2 protein (Epithelial cell transfor	renal, ovar, blad	mAb+s.m.
	423161	AL049227	Hs.124776	downstream of cadherin 6 (by 3.3kb)		

423184	NM_004428	Hs.1624	ephrin-A1	pros, panc, renal	mAb+s.m.
423242	AL039402	Hs.125783	DEME-6 protein	breast, renal, ovar, pros, colon	CTL
423422	AC005175	Hs.128425	NY-REN-24 antigen	glio	mAb
423508	AW504297	Hs.129711	hepatitis A virus cellular receptor 1	renal, colon	s.m.
423583	AL122055	Hs.129836	KIAA1028 protein	pros	diag
423634	AW959908	Hs.1690	heparin-binding growth factor binding pr	lung, blad, headnk, panc	mAb+diag+s.m.
423673	BE003054	Hs.1695	matrix metalloproteinase 12 (macrophage	colon, stom, ovar	CTL
423936	U77629	Hs.135639	achaete-scute complex (Drosophila) homol	colon, stom, ovar	mAb+diag
423961	D13666	Hs.135348	periostin (OSF-2os)	breast, colon, blad, lung, fibro, panc, headnk, ovar, mela	mAb+s.m.
424008	R02740	Hs.137555	putative chemokine receptor, GTP-binding	blad, headnk, stom, cerv, esoph	diag
424046	AF027866	Hs.138202	serine (or cysteine) proteinase inhibitor	headnk, lung, cerv	mAb+s.m.+CTL
424252	AK000520	Hs.143811	hypothetical protein FLJ20513	colon, stom	s.m.
424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	mela, fibro	s.m.
424381	AA285249	Hs.146329	protein kinase Chk2 (CHEK2)	lung, colon, test	s.m.
424411	NM_005209	Hs.146549	crystallin, beta A2	panc	s.m.
424502	AF242388	Hs.149585	lensin	lung	s.m.
424503	NM_002205	Hs.149609	integrin, alpha 5 (fibronectin receptor,	panc, pros, angio, blad, lung	mAb+s.m.
424620	AA101043	Hs.151254	kallikrein 7 (chymotrypsin, stratum com	ovar	diag
424687	J05070	Hs.151738	matrix metalloproteinase 9 (gelatinase B	headnk, panc, lung, blad, uter, cerv, colon, stom, test, mela	diag
424735	U31875	Hs.272499	short-chain alcohol dehydrogenase family	blad, breast	CTL+s.m.
424825	AF207069	Hs.153357	procollagen-lysine, 2-oxoglutarate 5-dio	mela	CTL+s.m.
424905	NM_002497	Hs.153704	NIMA (never in mitosis gene a)-related k	ovar, blad, lung, headnk, panc, stom	s.m.
425009	X58288	Hs.154151	protein tyrosine phosphatase, receptor I	renal, fibro	mAb+s.m.
425071	NM_013989	Hs.154424	deiodinase, iodothyronine, type II	pros, colon, stom, uter, cerv, headnk, esoph, panc	diag
425088	AA663372	Hs.169395	hypothetical protein FLJ12015	glio, mela	mAb+s.m.+CTL
425115	R44664	Hs.123956	downstream of: G protein-coupled recept	glio	mAb+s.m.
425247	NM_005940	Hs.155324	matrix metalloproteinase 11 (stromelysin	breast, ovar, lung, colon, panc, headnk, stom, uter, cerv, blad, esoph	mAb+diag+s.m.
425322	U63630	Hs.155637	protein kinase, DNA-activated, catalytic	lung, headnk	s.m.
425353	AB007937	Hs.158287	syndecan 3	mela, glio	mAb+s.m.
425650	NM_001944	Hs.1925	desmoglein 3 (pemphigus vulgaris antigen	lung, headnk, cerv, esoph, blad	mAb
425721	AC002115	Hs.159309	uroplakin 1A	blad	CTL+diag
425723	NM_014420	Hs.159311	dicikopl (Xenopus laevis) homolog 4	endo, uter, colon	s.m.
425734	AF056209	Hs.159396	peptidylglycine alpha-amidating monooxyg	lung	mAb+diag
425776	U25128	Hs.159499	parathyroid hormone receptor 2	ovar, uter, lung	s.m.
425842	AI587490	Hs.159623	NK-2 (Drosophila) homolog B	panc, glio	mAb+s.m.
425852	AK001504	Hs.159651	death receptor 6, TNF superfamily member	blad, lung, headnk	mAb
425883	AL137708	Hs.161031	Homo sapiens mRNA: cDNA DKFZp434K0322 (I	blad, panc	mAb+s.m.
425921	NM_007231	Hs.162211	solute carrier family 6 (neurotransmitte	stom, panc	mAb+s.m.
425998	AU076629	Hs.165950	fibroblast growth factor receptor 4	renal	mAb+diag
426028	NM_001110	Hs.172028	a disintegrin and metalloproteinase doma	blad	nAb+diag
426215	AW963419	Hs.155223	stanniocalcin 2	breast, lung, renal, colon, ovar, uter	mAb+s.m.
426227	U67058	Hs.154299	Human proteinase activated receptor-2 mR	panc, lung, colon, esoph, stom	diag
426322	J05068	Hs.2012	transcobalamin I (vitamin B12 binding pr	panc, blad, stom	CTL+s.m.
426344	H41821	Hs.322469	transcriptional activator of the c-fos p	glio	CTL+s.m.
426427	M86699	Hs.169840	TTK protein kinase	ovar, lung, headnk, cerv, colon, uter, stom, test	s.m.
426451	AI908165	Hs.169946	GATA-binding protein 3 (T-cell receptor	blad, breast	mAb+diag
426514	BE616633	Hs.170195	bone morphogenetic protein 7 (osteogenic	ovar, colon, blad, lung, cerv	diag
426600	NM_003378	Hs.171014	VGF nerve growth factor inducible	mela	mAb+s.m.
426761	A015709	Hs.172089	PORIMIN Pro-oncosis receptor inducing m	lung, esoph, pros, uter, panc, colon, ovar, headnk	mAb+s.m.
426812	AF105365	Hs.172613	solute carrier family 12 (potassium/chlo	renal	CTL
426890	AA393167	Hs.41294	ESTs	renal, colon, ovar, uter, stom	CTL+s.m.
427239	BE270447	Hs.356512	ubiquitin carrier protein	lung, blad, test, mela	CTL
427335	AA448542	Hs.251677	G antigen 7B	lung, headnk, blad, mela, esoph	CTL+s.m.
427343	AI880044	Hs.176977	protein kinase C binding protein 2	glio	CTL
427722	AK000123	Hs.180479	hypothetical protein FLJ20116	colon, stom, panc	s.m.
427747	AW411425	Hs.180655	serine/threonine kinase 12	blad, lung, ovar, stom, test, esoph	mAb
427923	AW274357	Hs.301406	FGENESH predicted 11 TM protein	mela	mAb+diag
427969	NM_001963	Hs.2230	epidermal growth factor (beta-urogastron	panc	CTL
428093	AW594506	Hs.104830	ESTs	ovar, panc	mAb+s.m.
428141	D50402	Hs.182611	solute carrier family 11 (proton-coupled	glio	s.m.
428179	AI127772	Hs.279696	serumglucocorticoid regulated kinase-6	breast	mAb+s.m.
428187	AI687303	Hs.285529	G protein-coupled receptor 49	ovar, uter, colon, stom	diag
428242	H55709	Hs.2250	leukemia inhibitory factor (cholestergic	ovar, panc, lung	mAb+s.m.
428296	NM_003058	Hs.183572	solute carrier family 22 (organic cation	renal	mAb+diag+s.m.
428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	uter, ovar, fibro, pros, panc, lung, blad, headnk, esoph, mela, stom	diag
428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin	headnk, stom, esoph, colon	diag
428392	H10233	Hs.2265	secretory granule, neuroendocrine protei	panc	s.m.
428450	NM_014791	Hs.184339	KIAA0175 gene product	ovar, cerv, panc, lung, blad, mela	s.m.
428479	Y00272	Hs.334562	cell division cycle 2, G1 to S and G2 lo	lung, blad, colon, uter, ovar	mAb+s.m.
428484	AF104032	Hs.184601	solute carrier family 7 (cationic amino	lung, blad, headnk, cerv, esoph, glio, uter, stom, colon, mela	diag
428486	AW583497	Hs.184604	pancreatic polypeptide	panc	diag
428505	AL035461	Hs.2281	chromogranin B (secretogranin 1)	panc, lung	mAb
428513	BE220806	Hs.184697	plexin C1	mela, panc, stom, headnk	mAb+s.m.
428579	NM_005756	Hs.184942	G protein-coupled receptor 64	ovar, EWS, uter	CTL+s.m.
428664	AK001666	Hs.189095	similar to SALL1 (sal (Drosophila)-like	blad, ovar, pros, lung, stom, test	mAb
428698	AA852773	Hs.334838	KIAA1866 protein	breast, colon, lung, panc, stom, headnk, ovar, EWS	diag
428748	AW593206	Hs.98785	Ksp37 protein	lung	diag
428758	AA433968	Hs.98502	CA125 antigen; mucin 16	ovar, cerv, lung, panc, stom, renal	diag
428778	AK000530	Hs.193326	fibroblast growth factor receptor-like 1	ovar	mAb+s.m.
428784	Y12851	Hs.193470	purinergic receptor P2X, ligand-gated io	glio, mela	mAb+s.m.+CTL
428841	AA18430	Hs.104935	ESTs	renal	mAb+diag
428953	AA306610	Hs.348183	tumor necrosis factor receptor superfam	cerv, panc, colon, stom, headnk, renal	diag
428969	AF120274	Hs.194689	arctin	lung, cerv	

5	428970	BE276891	Hs.194691	refinoic acid induced 3 (RAIG1); metabo	stom, panc, colon, ovar	mAb+s.m.
	429149	AW193360	Hs.197962	Homolog of mouse ADP-ribosylation factor	glio	mAb+s.m.
	429211	AF052693	Hs.198249	gap junction protein, beta 5 (connexin 3	lung, blad, headnk, cerv, esoph, stom, mela	mAb+s.m.
	429263	AA019004	Hs.198396	ATP-binding cassette, sub-family A (ABC1	lung	mAb+s.m.
	429276	AF056085	Hs.198612	G protein-coupled receptor 51	angio, blad, glio	mAb+s.m.
	429353	AL117406	Hs.335891	ATP-binding cassette transporter MRP8	breast, pros	mAb+s.m.
	429547	AW009166	Hs.99376	FGFESH predicted novel secreted protein	panc, headnk, lung, ovar	diag
	429610	AB024937	Hs.211092	LUNX protein; PLUNC (palate lung and nas	lung, fibro	mAb+diag
10	429903	AL134197	Hs.93597	cyclin-dependent kinase 5, regulatory su	lung, mela	s.m.
	429910	NM_000867	Hs.2507	5-hydroxytryptamine (serotonin) receptor	leio	mAb+s.m.
	430147	R60704	Hs.234434	huiry/enhancer-of-split related with YRP	glio	s.m.
	430280	AA361258	Hs.237868	interleukin 7 receptor	mela, lung, panc, stom, esoph, headnk	mAb+s.m.+CTL
	430377	NM_001922	Hs.301865	dopachrome tautomerase (dopachrome delta	mela	CTL
15	430486	BE062109	Hs.241551	chloride channel, calcium activated, fam	lung, blad, headnk, cerv, esoph	mAb+s.m.
	430822	AJ005371	Hs.248017	glyceradehyde-3-phosphate dehydrogenase	mela	s.m.
	430890	XS4232	Hs.2699	ghypican 1	glio, lung, cerv, blad, esoph	mAb+s.m.
	431053	S40369	Hs.249141	Glutamate receptor subunit	glio	mAb
	431130	NM_006103	Hs.2719	HE4; epididymis-specific, whey-acidic pr	ovar, uter	diag
20	431462	AW593672	Hs.256311	granin-like neuroendocrine peptide precu	panc, lung, glio, test	diag
	431515	NM_012152	Hs.258583	EDG-7 (endothelial differentiation, lys	ovar, pros, lung, blad	mAb+s.m.
	431620	AA126109	Hs.264981	Z-5-oligoadenylate synthetase 2 (69-71	esoph, cerv	CTL+s.m.
	431629	AJ077025	Hs.265827	interferon, alpha-inducible protein (clo	panc, uter, cerv, stom, esoph, mela	mAb+diag
	431630	NM_002204	Hs.265829	Integrin, alpha 3 (antigen CD49C, alpha	ovar, panc, blad, headnk, mela, renal	mAb+s.m.
25	431640	AA534308	Hs.2860	POU domain, class 5, transcription facto	test, renal, blad	CTL
	431846	BE019924	Hs.271580	uroplakin 1B	lung, blad, headnk, uter, cerv, stom, ovar	mAb+diag
	431870	AW449902	Hs.105500	ESTs	renal	mAb+s.m.+CTL
	431939	AW008061	Hs.231994	ESTs	renal, colon	mAb+s.m.+CTL
	431958	X63629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta	lung, blad, cerv, headnk, ovar, colon, pros, panc, breast, esoph, test, mela	mAb+diag
30	432196	AW300888	Hs.273230	hypothetical protein FLJ10830	renal	CTL
	432201	AJ538613	Hs.298241	Transmembrane protease, serine 3	breast, colon, ovar, stom, panc, uter, cerv, lung	mAb+diag+s.m.
	432579	AF043244	Hs.278439	nucleolar protein 3 (apoptosis repressor	renal	CTL
	432596	AJ224741	Hs.278461	matrin 3	panc, breast	diag
	432606	NM_002104	Hs.3066	granzyme K (serine protease, granzyme 3;	renal, breast, lung, stom, hepC, fibro	CTL
35	432800	BE391046	Hs.278962	AIM-1 protein	mela, pros	mAb+s.m.
	432829	W60377	Hs.57772	ESTs	blad	CTL+s.m.
	432867	AW016936	Hs.233364	ESTs	stom, colon	mAb+s.m.+CTL
	432874	W94322	Hs.279651	melanoma inhibitory activity	panc, stom, mela	diag
	432990	AL036071	Hs.279899	tumor necrosis factor receptor superfam	pros, renal	mAb+s.m.
40	433001	AF217513	Hs.279905	clone HQ0310 PRO0310p1	colon, breast, lung, blad, cerv, uter, test, mela	s.m.
	433447	U29195	Hs.3281	neuronal pentraxin II	mela, esoph, colon, renal	diag
	433848	AF095719	Hs.93764	carboxypeptidase A4	headnk, esoph, lung	s.m.
	433867	AK000596	Hs.3618	hippocatin-like 1	renal	CTL
	434206	AW136973	Hs.362915	ESTs, Weakly similar to S69890 mitogen i	stom, colon	CTL+s.m.
	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	mela	mAb+s.m.+CTL
45	435013	H91923	Hs.110024	NM_020142 Homo sapiens NADH:ubiquinone o	renal, lung	diag
	435472	AW972330	Hs.283022	triggering receptor expressed on myeloid	glio	mAb
	435505	AF200492	Hs.211238	Interleukin-1 homolog 1	lung, headnk	diag
	435869	AF255910	Hs.54650	junctional adhesion molecule 2	angio, glio	mAb
50	436456	AW292677	Hs.248122	melanin-concentrating hormone receptor (	mela, glio	mAb+s.m.
	436480	AJ271643	Hs.87469	putative acid-sensing ion channel	glio	mAb+s.m.
	436481	AA379597	Hs.5199	HSPC150 protein similar to ubiquitin-con	lung, blad, colon, ovar, uter, headnk, test	s.m.
	436576	AI458213	Hs.77542	ESTs	renal, panc, headnk, lung	mAb+s.m.
	436608	AA628980	Hs.192371	down syndrome critical region protein DS	blad, lung	CTL+s.m.
55	436895	AF037335	Hs.5338	carbonic anhydrase XII	breast, renal, ovar, glio	mAb+s.m.
	436961	AW375874	Hs.156704	ESTs	lung, panc, renal, uter, colon	CTL
	436982	AB018305	Hs.5378	spondin 1, (I-spondin) extracellular mat	ovar, fibro	diag
	437016	AL076916	Hs.5398	guanine monophosphate synthetase	lung, blad, cerv, esoph, headnk	s.m.
	437044	AL035864	Hs.69517	differentially expressed in Fanconi's an	headnk, cerv, lung, blad, breast, pros, ovar, stom, esoph	CTL
60	437100	AJ761073	Hs.14535	Homo sapiens cDNA: FLJ23314 fis, clone H	panc, renal	mAb+s.m.+CTL
	437212	AJ765021	Hs.210775	ESTs	renal, uter, ovar	mAb+s.m.+CTL
	437789	AI581344	Hs.127812	ESTs, Weakly similar to T17330 hypotheti	lung	CTL
	437852	BE001836	Hs.256897	putative GPCR	blad, lung	mAb+s.m.
65	437938	AJ950087	Hs.369628	gb:wq05c02.x1 NCI_CGAP_Kd12 Homo sapien	renal, ovar, uter, cerv, blad, renal	mAb+s.m.+CTL
	438380	T06430	Hs.6194	chondroitin sulfate proteoglycan BEHAB/b	glio, mela	diag
	438549	BE368801	Hs.21858	trinucleotide repeat containing 3	mela	CTL+diag
	438859	AI559626	Hs.93522	Homo sapiens mRNA for KIAA1647 protein	renal	mAb+s.m.+CTL
	438929	AW195515	Hs.253177	ESTs	renal	mAb+s.m.+CTL
	438966	AW979074		gb:ESTJ391184 MAGE resequences, MAGP Ho	renal	mAb
70	439018	AW300887	Hs.26638	membrane-spanning 4-domains, subfamily A	uter, stom, pros, fibro	mAb
	439223	AW238299	Hs.250618	UL16 binding protein 2	lung, headnk, cerv, esoph, blad, colon	mAb+s.m.
	439477	W69813	Hs.58042	ESTs, Moderately similar to GFR3_HUMAN G	lung	diag
	439569	AW602166	Hs.222399	CEGP1 protein	breast, AWPC, pros, blad	mAb+s.m.
	439606	W79123	Hs.58561	G protein-coupled receptor 87	lung, blad, headnk, cerv, esoph	mAb+s.m.
75	439738	BE246502	Hs.9598	sema domain, immunoglobulin domain (Ig).	blad, lung, cerv, renal	mAb+s.m.
	439759	AI359055	Hs.67709	Homo sapiens mRNA full length insert cDN	colon, stom, panc, lung	mAb+s.m.+CTL
	439979	AW600291	Hs.6823	hypothetical protein FLJ10430	renal, cerv, pros, headnk, colon, test	mAb
	440006	AK000517	Hs.6844	NALP2 protein; PYRIN-Containing APAF1-i	blad, ovar, lung, headnk, test	s.m.
	440065	W03476	Hs.266331	Homo sapiens Fc receptor homolog express	mela	diag
80	440225	BE295782	Hs.159	tumor necrosis factor receptor superfam	glio	mAb
	440304	BE159984	Hs.125395	hepatitis A virus cellular receptor 1	renal, colon, blad	mAb+s.m.
	440311	AJ733079	Hs.125407	ESTs, Moderately similar to ALUE_HUMAN I	renal	mAb+s.m.+CTL
	440516	S42303	Hs.161	cadherin 2, type 1, N-cadherin (neuronal	glio, ovar, uter, renal, hepC	mAb+diag
	440672	AF083811	Hs.7345	MAD1 (mitotic arrest deficient, yeast, h	mela	s.m.



441362	BE614410	Hs.23044	RAD51 (S. cerevisiae) homolog (E coli Re	lung, blad, headnk, test, mela, esoph	s.m.
441392	AW451831	Hs.222119	ESTs, Weakly similar to S30433 keratin 1	renal	mAb+s.m.+CTL
442006	AW975183	Hs.372210	ESTs, Weakly similar to S72482 hypothesi	fibro, angio	mAb
442117	AW664964	Hs.126899	ESTs; hypothetical protein for IMAGE:447	breast, lung, blad, panc, headnk, stom, ovar, pros	mAb+s.m.
442133	AW874138	Hs.129017	ESTs; type Ia transmembrane protein	uter, ovar, renal	mAb
442438	AA959598		gbos26b03.s1 NCI_CGAP_Kd5 Homo sapiens	uter, ovar, renal	mAb+s.m.+CTL
443105	X96753	Hs.9004	chondroitin sulfate proteoglycan 4 (mela	mela	mAb+diag
443211	A1128388	Hs.143655	ESTs	blad, ovar, lung, headnk, stom	mAb+s.m.+CTL
443247	BE614387	Hs.333893	c-Myc target JPO1	colon, lung, blad, panc	CTL
443426	AF098158	Hs.9329	chromosome 20 open reading frame 1	colon, lung, blad, stom, test, mela	diag
443595	AF169312	Hs.9613	PPAR(gamma) angiopoietin related protein	renal	CTL
443646	AI085198	Hs.164226	Thrombospondin 1	angio, panc, uter	diag
443785	AW449952	Hs.190125	basic-helix-loop-helix-PAS protein	glio, uter, ovar	mAb+s.m.+CTL
443859	NM_013409	Hs.9914	folistatin	lung, cerv, headnk, blad, esoph	diag
443987	AW163123	Hs.10071	seven transmembrane protein TM7SF3	renal	mAb+s.m.
444006	BE395085	Hs.10086	type I transmembrane protein Fn14	panc, colon, lung, ovar, renal, esoph, mela, blad, stom, cerv	mAb
444371	BE540274	Hs.239	forkhead box M1	lung, headnk, blad, glio, test, mela	s.m.
444381	BE387335	Hs.283713	hypothetical protein BC014245	breast, colon, blad, lung, panc, headnk, ovar, stom, uter,	
				renal, angio, test, mela, esoph	diag
444488	AW192879	Hs.355660	ancient conserved domain protein 4	renal	mAb+s.m.
444527	NM_005408	Hs.11383	small inducible cytokine subfamily A (Cy	fibro, esoph	diag
444781	NM_014400	Hs.11950	GPI-anchored metastasis-associated prote	lung, blad, headnk, cerv	mAb+diag
444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	ovar, lung, blad, headnk, panc, cerv, stom, uter, colon, esoph	CTL+s.m.
444809	BE207568	Hs.208219	oculoparvin	mela	mAb+s.m.
445070	NM_000677	Hs.258	adenosine A3 receptor	glio, renal	mAb+s.m.
445417	AK001058	Hs.12680	a disintegrin-like and metalloprotease w	panc, headnk, stom, lung, esoph	diag
445537	AJ245671	Hs.12844	EGF-like-domain, multiple 6	ovar, blad, uter, breast, lung, headnk, renal, fibro, panc, cerv	mAb+diag
445891	AW391342	Hs.199460	DPCR1 protein	stom, panc, esoph, omuc, esoph	mAb
445895	D29954	Hs.13421	KIAA0056 protein	pros	CTL
446051	BE048061	Hs.37054	ephrin-A3	colon, breast	mAb+diag
446163	AA026880	Hs.25252	prolactin receptor	breast, cerv, uter	mAb+s.m.
446232	AI281848	Hs.194691	retinoic acid induced 3	stom, panc, colon, ovar	mAb+s.m.
446341	AI040763	Hs.310735	FGENESH prediction similar to multidrug	mela	mAb+s.m.
446619	AU076543	Hs.313	secreted phosphoprotein 1 (osteopontin,	ovar, fibro, panc, headnk, lung, colon, blad, mela, esoph, uter	diag
446650	AB016625	Hs.15813	solute carrier family 22 (organic cation	renal	mAb+s.m.
446921	AB012113	Hs.16530	small inducible cytokine subfamily A (Cy	breast, panc, headnk, lung, fibro, mela	diag
447004	AW296968	Hs.157539	FGENESH predicted secreted protein	glio	mAb+diag
447033	AI357412	Hs.157601	Predicted gene: Eos cloned; secreted w/v	colon, pros, fibro, breast, ovar, lung, panc	CTL+diag
447072	D61594	Hs.17279	tyrosyl/protein sulfotransferase 1	glio, panc	CTL+s.m.
447131	NM_004585	Hs.17466	retinoic acid receptor responder (tazaro	renal, breast, stom, lung, mela, ovar	mAb+s.m.
447208	BE315291	Hs.237971	hypothetical protein MGC5627	esoph, stom, colon	CTL+diag
447269	NM_004861	Hs.17958	ceretreside (3-phosphoadenylylsulfate:g	renal	CTL
447342	AI199268	Hs.19322	Homo sapiens, Similar to RIKEN cDNA 2010	colon, blad, pros, lung, stom, AWPC, ovar	CTL
447400	AK000322	Hs.18457	hypothetical protein FLJ20315	colon, pros, stom, uter	s.m.
447674	BE270640	Hs.19192	cyclin-dependent kinase 2	mela	CTL
447835	AW591623	Hs.164129	ESTs, Weakly similar to I38022 hypothesi	renal, ovar, uter	mAb+s.m.+CTL
447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	mela	mAb+s.m.
448105	AW591433	Hs.298241	Transmembrane protease, serine 3	breast, panc, colon, lung, ovar, stom	mAb+s.m.+CTL
448243	AW369771	Hs.367688	integrin, beta 8	ovar, uter, lung, stom, headnk, glio, panc	mAb+s.m.
448321	NM_005883	Hs.20912	adenomatous polyposis coli like	glio	CTL+s.m.
448499	BE613280	Hs.77550	p53-regulated DOA3	glio	mAb+s.m.
448595	AB014544	Hs.21572	KIAA0644 gene product	breast, glio	diag
448610	NM_006157	Hs.21602	nel (chicken)-like 1	mela	mAb+s.m.
448733	NM_005629	Hs.187958	solute carrier family 6 (neurotransmitte	lung, renal	mAb+s.m.
448844	AI581519	Hs.177164	FGENESH predicted novel cell surface pr	panc, lung, stom, omuc	mAb
449048	Z45051	Hs.22920	similar to S68401 (cattle) glucose induc	panc, ovar, uter, glio, headnk, lung	mAb+s.m.
449444	AW818436	Hs.351306	solute carrier family 16 (monocarboxylic	renal, panc	mAb+s.m.
449523	NM_000579	Hs.54443	chemokine (C-C motif) receptor 5	lung, panc, renal, stom, hepC, fibro, mela	CTL
449720	AA311152	Hs.288708	hypothetical protein FLJ21562	colon	s.m.
449722	BE280074	Hs.23960	cyclin B1	headnk, blad, lung, panc, angio, test, mela, esoph	mAb+s.m.
450001	NM_001044	Hs.406	solute carrier family 6 (neurotransmitte	renal	mAb+diag+s.m.
450375	AA009647	Hs.352537	a disintegrin and metalloproteinase doma	breast, ovar, headnk, panc, lung, esoph, colon	CTL
450531	AW301032	Hs.203800	(BC017500) Similar to hypothetical prote	colon	mAb+diag
450701	H39960	Hs.288467	hypothetical protein XP_098151 (leucine-	lung, headnk, panc, breast, stom, ovar, esoph, colon	s.m.
450726	AW204600	Hs.355462	HUMPSPBA Human pulmonary surfactant-asso	fibro, lung	mAb+s.m.
450931	N25156	Hs.25648	tumor necrosis factor receptor superfam	lung, renal	diag
450983	AA305384	Hs.25740	ERO1 (S. cerevisiae)-like	blad, lung, ovar, panc	mAb+s.m.
451099	R52795	Hs.25954	interleukin 13 receptor, alpha 2	glio, fibro, mela	CTL
451310	AW250651	Hs.26213	Human DNA sequence from clone RP3-447F3	colon, panc	mAb
451527	AF022813	Hs.26518	transmembrane 4 superfamily member 7	renal	CTL+s.m.
451537	R56631	Hs.26550	retinoid X receptor, gamma	mela	mAb+diag
451668	Z43948	Hs.326444	cartilage acidic protein 1	blad, ovar, lung	CTL
451939	U80456	Hs.27311	single-minded (Drosophila) homolog 2	pros	CTL+s.m.
451979	F06972	Hs.27372	endothelial tyrosine kinase (Etk) (BMX)	angio	CTL
451988	AF263928	Hs.27410	papillomavirus regulatory factor PRF-1	renal	mAb+s.m.+diag
452097	AB002364	Hs.27916	a disintegrin-like and metalloprotease (	ovar	mAb
452190	H26735	Hs.91668	Homo sapiens clone PP1498 unknown mRNA	breast, stom, panc	mAb+s.m.
452194	AI694413	Hs.373599	olfactory receptor, family 2, subfamily	stom, panc, renal, colon, mela, fibro	mAb+s.m.
452203	X57522	Hs.352018	transporter 1, ATP-binding cassette, sub	cerv, esoph, blad, stom, mela, renal	diag
452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fs, clone PL	breast, headnk, panc, stom, lung, esoph, fibro	mAb+s.m.
452355	N54926	Hs.29202	G protein-coupled receptor 34	glio, fibro, panc	diag
452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	blad, breast, panc, headnk, stom, lung, arth, renal, esoph	diag
452431	U88879	Hs.29499	tuft-like receptor 3	renal, hepC	mAb

5	452747	BE153855	Hs.61460	Ig superfamily receptor UNIR	breast, blad, lung, headnk, ovar, stom, uter, panc	mAb
	452795	AW392555	Hs.18878	hypothetical protein FLJ21620	renal, headnk, colon, lung, panc	mAb+s.m.-CTL
	452838	U65011	Hs.30743	preferentially expressed antigen in mela	lung, ovar, breast, mela, test, esoph, renal	CTL
	452862	AW378065	Hs.8587	ADAMTS2 (a disintegrin-like and metallo	headnk, breast, colon, arth, lung, blad, esoph, stom	mAb+diag
	453195	BE241876	Hs.32352	hypothetical protein DKFZp434K1210	renal	CTL
	453496	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	renal, pros	mAb+s.m.
	453642	AJ370936	Hs.34074	dipeptidylpeptidase VI	glio	mAb+s.m.
	453837	AL138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	renal, mela	s.m.
10	453857	AL080235	Hs.35861	Ras-induced senescence 1 (RIS1)	glio, lung, uter, headnk, cerv, panc, pros	mAb+s.m.
	453968	AA847843	Hs.62711	High mobility group (nonhistone chromoso	lung, uter, blad, test	CTL+s.m.
	456546	AI890321	Hs.203845	KCNK15 potassium channel, subfamily K, m	ovar	mAb+s.m.
	456662	NM_002448	Hs.1494	msh (Drosophila) homeo box homolog 1 (fo	uter, ovar	CTL
	456759	BE259150	Hs.127792	delta (Drosophila)-like 3	glio, lung	mAb+s.m.
15	457133	MS4968	Hs.351221	v-Ki-ras2 Kirsten rat sarcoma 2 viral on	panc	s.m.
	457489	AE93815	Hs.127179	cryptic gene	panc, pros, lung	diag
	457561	AA331517	Hs.286055	chimerin (chimaerin) 2	glio	mAb+s.m.
	458079	AJ796870	Hs.54277	Homo sapiens similar to RIKEN cDNA 28100	mela, fibro	mAb
	458435	AI418718	Hs.144121	ESTs, Weakly similar to T46916 hypotheti	glio	mAb+s.m.-CTL
20	458527	AW088642	Hs.97984	SRY (sex determining region Y)-box 17 (S	ovar, uter, test	CTL

TABLE 66B:

Pkey: Unique Eos probe set identifier number  
 CAT number: Gene cluster number  
 Accession: Genbank accession numbers

25	Pkey	CAT Number	Accession
	409745	MH1944_5	BI030997 AA921874 AW188822 BI027862 AJ347618 AJ361453 AJ088754 AW207491 AA077391 BG012775 BG997382 AA286833 AA150722 BI007625 BI027864 BI009100 BI006275 BI006270 BI031000 BI029864 BI006277 BI007627 BI006266 BI006991 BI006990 BI007763 BI007762 BG997377 AA150780 BI033518 BI027818 BG015789 BI033807 AA341445
30	438966	1242593_1	AW979074 AA834841 AA828650
	442438	24590_1	AK022175 AU147222 AI124945 AU121400 F07756 AW979025 AA828595 AA828577 BE935573 AA829588 AI743516 BE315309 BE047365 AI761053 AW168960 AA833900 BG679419 BE171071 BF034368 BF754297 R61781 F08149 F07647 T77332 AA897461 AJ829714 AJ376820 AI809991 AW561854

TABLE 66C:

Pkey: Unique number corresponding to an Eos probe set  
 Ref: Sequence source. The 7 digit numbers in this column are Genbank Identifier (GI) numbers. "Dunham, et al." refers to the publication entitled "The DNA sequence of human chromosome 22" Dunham, et al. (1999) Nature 402:489-495.  
 Strand: Indicates DNA strand from which exons were predicted.  
 N1\_position: Indicates nucleotide positions of predicted exons.

45	Pkey	Ref	Strand	N1_position
	400843	9188605	Plus	5863-5970,7653-7784,8892-9023,9673-9807,
	402075	8117407	Plus	121907-122035,122804-122921,124019-12416
	402901	8894222	Minus	175426-175667
	404287	2326514	Plus	53134-53281
	404682	9797231	Minus	40977-41150
	404875	9801324	Plus	96588-96732,97722-97831
50	404977	3738341	Minus	43081-43229
	405033	7107731	Minus	142358-142546
	405547	1054740	Plus	124361-124520,124914-125050
	406400	9256298	Plus	1553-1712,1878-2140,4252-4385,5922-6077

TABLE 67:

Pkey: Unique Eos probe set identifier number  
 ExAccn: Exemplar Accession number, Genbank accession number  
 UnigenelD: Unigene number  
 Unigene Title: Unigene gene title  
 Seq ID No: Sequence Identification Number linking the information in Table 67 to the sequences in Table 68

65	Pkey	ExAccn	UnigenelD	Unigene Title	Seq ID No
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	Seq ID No 1 & 199
	418007	M13509	Hs.83169	matrix metalloproteinase 1 (interstitial	Seq ID No 2 & 200
	428368	BE440042	Hs.83326	matrix metalloproteinase 3 (stromelysin	Seq ID No 3 & 201
	417856	AW067903	Hs.82772	collagen, type XI, alpha 1	Seq ID No 4 & 202
	444381	BE387335	Hs.283713	hypothetical protein BC014245	Seq ID No 5 & 203
	452281	T93500	Hs.28792	Homo sapiens cDNA FLJ11041 fs, clone PL	Seq ID No 6
70	428698	AA852773	Hs.334838	KIAA1866 protein	Seq ID No 7 & 204
	452862	AW378065	Hs.8587	ADAMTS2 (a disintegrin-like and metallo	Seq ID No 8 & 205
	432201	AJ538613	Hs.298241	Transmembrane protease, serine 3	Seq ID No 9 & 206
	434206	AW136973	Hs.362915	ESTs, Weakly similar to S69890 mitogen i	Seq ID No 10 & 207
	422260	AA315993	Hs.105484	regenerating gene type IV	Seq ID No 11 & 208
75	409041	AB033025	Hs.50081	Hypothetical protein, XP_051860 (KIAA119	Seq ID No 12 & 209
	443426	AF098158	Hs.9329	chromosome 20 open reading frame 1	Seq ID No 13 & 210
	443211	AI128388	Hs.143655	ESTs	Seq ID No 14
	428664	AK001666	Hs.189095	similar to SALL1 (sal (Drosophila)-like	Seq ID No 15 & 211
80	413278	BE563085	Hs.833	interferon-stimulated protein, 15 kDa	Seq ID No 16 & 212
	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	Seq ID No 17 & 213
	452401	NM_007115	Hs.29352	tumor necrosis factor, alpha-induced pro	Seq ID No 18 & 214
	408380	AF123050	Hs.44532	diubiquitin	Seq ID No 19 & 215
	416209	AA236776	Hs.79078	MAD2 (mitotic arrest deficient, yeast, h	Seq ID No 20 & 216
	409757	NM_001898	Hs.123114	cystatin SN	Seq ID No 21 & 217



425921	NM_007231	Hs.162211	solute carrier family 6 (neurotransmitter)	Seq ID No 22 & 218
452194	A1694413	Hs.373599	olfactory receptor, family 2, subfamily	Seq ID No 23 & 219
452194	A1694413	Hs.373599	olfactory receptor, family 2, subfamily	Seq ID No 24 & 220
444783	AK001468	Hs.62180	anillin (Drosophila Scraps homolog), act	Seq ID No 25 & 221
422956	BE545072	Hs.122579	ECT2 protein (Epithelial cell transformi	Seq ID No 26 & 222
424905	NM_002497	Hs.153704	NIMA (never in mitosis gene a)-related k	Seq ID No 27 & 223
415989	A1267700	Hs.351201	ESTs	Seq ID No 28
415989	A1267700	Hs.351201	ESTs	Seq ID No 29
424252	AK000520	Hs.143811	hypothetical protein FLJ20513	Seq ID No 30 & 224
424252	AK000520	Hs.143811	hypothetical protein FLJ20513	Seq ID No 31 & 225
432667	AW016936	Hs.233364	ESTs	Seq ID No 32
439759	AL359055	Hs.67709	Homo sapiens mRNA full length insert cDN	Seq ID No 33
428970	BE276891	Hs.194691	retinoic acid induced 3 (RAIG1); metabo	Seq ID No 34 & 226
428953	AA306610	Hs.348183	tumor necrosis factor receptor superfam	Seq ID No 35 & 227
428953	AA306610	Hs.348183	tumor necrosis factor receptor superfam	Seq ID No 36 & 228
428953	AA306610	Hs.348183	tumor necrosis factor receptor superfam	Seq ID No 37 & 229
428953	AA306610	Hs.348183	tumor necrosis factor receptor superfam	Seq ID No 38 & 230
428953	AA306610	Hs.348183	tumor necrosis factor receptor superfam	Seq ID No 39 & 231
452203	X57522	Hs.352018	transporter 1, ATP-binding cassette, sub	Seq ID No 40 & 232
428330	L22524	Hs.2256	matrix metalloproteinase 7 (matrilysin,	Seq ID No 41 & 233
436480	AJ271643	Hs.87469	putative acid-sensing ion channel	Seq ID No 42 & 234
407603	AW955705	Hs.62604	Homo sapiens, clone IMAGE:4299322, mRNA,	Seq ID No 43 & 235
425115	R44664	Hs.123956	downstream of G protein-coupled recept	Seq ID No 44 & 236
435472	AW972330	Hs.283022	triggering receptor expressed on myeloid	Seq ID No 45 & 237
418870	AF147204	Hs.89414	chemokine (C-X-C motif), receptor 4 (fus	Seq ID No 46 & 238
415511	AJ732617	Hs.182362	ESTs	Seq ID No 47
440304	BE159984	Hs.125395	hepatitis A virus cellular receptor 1	Seq ID No 48 & 239
423161	AL049227	Hs.124776	downstream of cadherin 6 (by 3.3kb)	Seq ID No 49 & 240
423161	AL049227	Hs.124776	downstream of cadherin 6 (by 3.3kb)	Seq ID No 50
410153	BE311926	Hs.15830	hypothetical protein FLJ12691	Seq ID No 51 & 241
410153	BE311926	Hs.15830	hypothetical protein FLJ12691	Seq ID No 52 & 242
410153	BE311926	Hs.15830	hypothetical protein FLJ12691	Seq ID No 53 & 243
410153	BE311926	Hs.15830	hypothetical protein FLJ12691	Seq ID No 54 & 244
436895	AF037335	Hs.5338	carbonic anhydrase XII	Seq ID No 55 & 245
436895	AF037335	Hs.5338	carbonic anhydrase XII	Seq ID No 56 & 246
421471	U90545	Hs.327179	solute carrier family 17 (sodium phospho	Seq ID No 57 & 247
428296	NM_003058	Hs.183572	solute carrier family 22 (organic cation	Seq ID No 58 & 248
426890	AA393167	Hs.41294	ESTs	Seq ID No 59 & 249
437212	AJ755021	Hs.210775	ESTs	Seq ID No 60
438966	AW979074		gb:EST391184 MAGE resequences, MAGP Homo	Seq ID No 61
440311	AJ733079	Hs.125407	ESTs, Moderately similar to ALUE_HUMAN 1	Seq ID No 62
437100	AJ761073	Hs.14535	Homo sapiens cDNA: FLJ22314 fs, clone H	Seq ID No 63
437100	AJ761073	Hs.14535	Homo sapiens cDNA: FLJ22314 fs, clone H	Seq ID No 64
450001	NM_001044	Hs.406	solute carrier family 6 (neurotransmitte	Seq ID No 65 & 250
419080	AW150835	Hs.18878	hypothetical protein FLJ21620	Seq ID No 66 & 251
443595	AF169312	Hs.9613	PPAR(gamma) angiopoietin related protein	Seq ID No 67 & 252
443595	AF169312	Hs.9613	PPAR(gamma) angiopoietin related protein	Seq ID No 68
410407	X66839	Hs.63287	carbonic anhydrase IX	Seq ID No 69 & 253
453496	AA442103	Hs.33084	solute carrier family 2 (facilitated glu	Seq ID No 70 & 254
420737	L08096	Hs.99899	CD70; tumor necrosis factor (ligand) s	Seq ID No 71 & 255
439979	AW600291	Hs.6823	hypothetical protein FLJ10430	Seq ID No 72 & 256
420789	A1670057	Hs.199882	ESTs	Seq ID No 73
420789	A1670057	Hs.199882	ESTs	Seq ID No 74
441392	AW451831	Hs.222119	ESTs, Weakly similar to S30433 keratin 1	Seq ID No 75 & 257
452431	U88879	Hs.29499	toll-like receptor 3	Seq ID No 76 & 258
431870	AW449902	Hs.105500	ESTs	Seq ID No 77
431870	AW449902	Hs.105500	ESTs	Seq ID No 78
443523	NM_000579	Hs.54443	chemokine (C-C motif) receptor 5	Seq ID No 79 & 259
409745	AA077391		gb:7B14E12 Chromosome 7 Fetal Brain cDNA	Seq ID No 80
438859	AJ559626	Hs.93522	Homo sapiens mRNA for KIAA1647 protein,	Seq ID No 81
409637	AA323948	Hs.55407	Homo sapiens mRNA; cDNA DKFZp434K0621 (f	Seq ID No 82 & 260
409637	AA323948	Hs.55407	Homo sapiens mRNA; cDNA DKFZp434K0621 (f	Seq ID No 83
409348	AI401535	Hs.146090	ESTs	Seq ID No 84
447269	NM_004861	Hs.17958	cerebroside (3'-phosphoadenylylsulfate:g	Seq ID No 85 & 261
453195	BE241876	Hs.32352	hypothetical protein DKFZp434K1210	Seq ID No 86 & 262
428841	AJ418430	Hs.104935	ESTs	Seq ID No 87
428841	AJ418430	Hs.104935	ESTs	Seq ID No 88
428841	AJ418430	Hs.104935	ESTs	Seq ID No 89
409663	AJ743750	Hs.98306	KIAA1862 protein	Seq ID No 90 & 263
409663	AJ743750	Hs.98306	KIAA1862 protein	Seq ID No 91 & 264
431939	AW008061	Hs.231994	ESTs	Seq ID No 92 & 265
432606	NM_002104	Hs.3066	granzyme K (serine protease, granzyme 3;	Seq ID No 93 & 266
411411	AA345241	Hs.55950	ESTs, Weakly similar to KIAA1330 protein	Seq ID No 94 & 267
433867	AK000596	Hs.3618	hippocalcin-like 1	Seq ID No 95 & 268
433867	AK000596	Hs.3618	hippocalcin-like 1	Seq ID No 96 & 269
437938	AJ950087	Hs.369628	gb:WQ05C02.x1 NCI_CGAP_Kd12 Homo sapien	Seq ID No 97
432579	AF043244	Hs.278439	nucleolar protein 3 (apoptosis repressor	Seq ID No 98 & 270
418526	BE019020	Hs.85838	solute carrier family 16 (monocarboxylic	Seq ID No 99 & 271
432196	AW300888	Hs.273230	hypothetical protein FLJ10830	Seq ID No 100 & 272
432196	AW300888	Hs.273230	hypothetical protein FLJ10830	Seq ID No 101 & 273
438929	AW195515	Hs.253177	ESTs	Seq ID No 102
410055	AJ250839	Hs.58241	gene for serine/threonine protein kinase	Seq ID No 103 & 274
446650	AB016625	Hs.15613	solute carrier family 22 (organic cation	Seq ID No 104 & 275

5	426812	AF105365	Hs.172613	solute carrier family 12 (potassium/chloride)	Seq ID No 105 & 276
	447131	NM_004585	Hs.17466	retinoic acid receptor responder (Iazaro)	Seq ID No 106 & 277
	449444	AW818436	Hs.351306	solute carrier family 16 (monocarboxylic)	Seq ID No 107 & 278
	422627	BE336857	Hs.118787	transforming growth factor, beta-induced	Seq ID No 108 & 279
	444488	AW192879	Hs.355660	ancient conserved domain protein 4	Seq ID No 109 & 280
	450931	N25156	Hs.25648	tumor necrosis factor receptor superfamily	Seq ID No 110 & 281
	409220	BE243323	Hs.51233	tumor necrosis factor receptor superfamily	Seq ID No 111 & 282
	409220	BE243323	Hs.51233	tumor necrosis factor receptor superfamily	Seq ID No 112 & 283
10	425958	AJ076629	Hs.165950	fibroblast growth factor receptor 4	Seq ID No 113 & 284
	425958	AJ076629	Hs.165950	fibroblast growth factor receptor 4	Seq ID No 114 & 285
	425009	X58288	Hs.154151	protein tyrosine phosphatase, receptor type 1	Seq ID No 115 & 286
	443987	AW163123	Hs.10071	seven transmembrane protein TMTSF3	Seq ID No 116 & 287
	432990	AL036071	Hs.279899	tumor necrosis factor receptor superfamily	Seq ID No 117 & 288
15	436576	AI458213	Hs.77542	ESTs	Seq ID No 118 & 289
	451527	AF022813	Hs.26518	transmembrane 4 superfamily member 7	Seq ID No 119 & 290
	448733	NM_005629	Hs.187958	solute carrier family 6 (neurotransmitter)	Seq ID No 120 & 291
	410274	AA381807	Hs.61762	hypoxia-inducible protein 2	Seq ID No 121 & 292
	125218	H91923	Hs.110024	Empirically selected from AFX single pr	Seq ID No 122 & 293
20	436961	AW375974	Hs.156704	ESTs	Seq ID No 123
	431630	NM_002204	Hs.265829	integrin, alpha 3 (antigen CD49C, alpha)	Seq ID No 124 & 294
	431630	NM_002204	Hs.265829	integrin, alpha 3 (antigen CD49C, alpha)	Seq ID No 125 & 295
	419508	AW997938	Hs.90786	ATP-binding cassette, sub-family C (CFTR)	Seq ID No 126 & 296
	431840	AA534908	Hs.2860	POU domain, class 5, transcription factor	Seq ID No 127 & 297
25	442438	AA959598		gbox26b03.s1 NCI_CGAP_Kid5 Homo sapiens	Seq ID No 128
	447835	AW591623	Hs.164129	ESTs, Weakly similar to I380222 hypotheti	Seq ID No 129
	429276	AF056085	Hs.198612	G protein-coupled receptor 51	Seq ID No 130 & 298
	448595	AB014544	Hs.21572	KIAA0644 gene product	Seq ID No 131 & 299
	440516	S42303	Hs.161	cadherin 2, type 1, N-cadherin (neuronal)	Seq ID No 132 & 300
30	456759	BE259150	Hs.127792	delta (Drosophila)-like 3	Seq ID No 133 & 301
	447004	AW296968	Hs.157539	FGFRESH predicted secreted protein	Seq ID No 134 & 302
	425088	AA663372	Hs.169395	hypothetical protein FLJ12015	Seq ID No 135 & 303
	409389	AB007979	Hs.301281	Homo sapiens mRNA, chromosome 1 specific	Seq ID No 136 & 304
	448321	NM_005883	Hs.20912	adenomatous polyposis coli like	Seq ID No 137 & 305
35	426344	HA1821	Hs.322469	transcriptional activator of the c-fos p	Seq ID No 138 & 306
	419704	AA429104	Hs.45057	ESTs	Seq ID No 139 & 307
	412959	D87458	Hs.75090	KIAA0282 protein	Seq ID No 140 & 308
	448499	BE613280	Hs.77550	p53-regulated DDA3	Seq ID No 141 & 309
	458435	AA18718	Hs.144121	ESTs, Weakly similar to T46916 hypotheti	Seq ID No 142 & 310
40	443785	AW449952	Hs.190125	basic-helix-loop-helix-PAS protein	Seq ID No 143 & 311
	427343	AI880044	Hs.176977	protein kinase C binding protein 2	Seq ID No 144 & 312
	416857	AA188775	Hs.292453	FGFRESH predicted TM containing protein	Seq ID No 145 & 313
	429149	AW193360	Hs.197962	Homolog of mouse ADP-ribosylation factor	Seq ID No 146 & 314
	418030	BE207573	Hs.83321	neuromedin B	Seq ID No 147 & 315
45	457581	AA331517	Hs.286055	chimerin (chimaerin) 2	Seq ID No 148 & 316
	457581	AA331517	Hs.286055	chimerin (chimaerin) 2	Seq ID No 149 & 317
	430147	R60704	Hs.234434	hairly/enhancer-of-split related with YRP	Seq ID No 150 & 318
	453642	AI370936	Hs.34074	dipeptidyl/peptidase VI	Seq ID No 151 & 319
	453857	AL080235	Hs.35861	Ras-induced senescence 1 (RIS1)	Seq ID No 152 & 320
50	449048	Z45051	Hs.22920	similar to S68401 (cattle) glucose induc	Seq ID No 153 & 321
	418506	AA084248	Hs.372651	Unknown protein for MGC:29643 (formerly	Seq ID No 154 & 322
	416636	N32536	Hs.42645	solute carrier family 16 (monocarboxylic)	Seq ID No 155 & 323
	421508	NM_004833	Hs.105115	absent in melanoma 2	Seq ID No 156 & 324
	421379	Y15221	Hs.103982	small inducible cytokine subfamily B (Cy	Seq ID No 157 & 325
55	428784	Y12851	Hs.193470	purinergic receptor P2X, ligand-gated io	Seq ID No 158 & 326
	431958	X63629	Hs.2877	cadherin 3, type 1, P-cadherin (placenta)	Seq ID No 159 & 327
	417542	J04129	Hs.82269	progesterone-associated endometrial prote	Seq ID No 160 & 328
	418678	NM_001327	Hs.167379	cancer/testis antigen (NY-ESO-1)	Seq ID No 161 & 329
	418678	NM_001327	Hs.167379	cancer/testis antigen (NY-ESO-1)	Seq ID No 162 & 330
60	420208	BE276055	Hs.95972	silver (mouse homolog) like	Seq ID No 163 & 331
	430377	NM_001922	Hs.301865	dopachrome tautomerase (dopachrome delta	Seq ID No 164 & 332
	438549	BE386801	Hs.21858	trinucleotide repeat containing 3	Seq ID No 165 & 333
	412580	AA113262	Hs.17901	similar to CABLES (Homo sapiens)	Seq ID No 166 & 334
	417166	AA431323	Hs.42146	Paired box protein Pax-3	Seq ID No 167 & 335
65	428513	BE220806	Hs.184697	plexin C1	Seq ID No 168 & 336
	447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	Seq ID No 169 & 337
	447937	AL109716	Hs.20034	Homo sapiens mRNA full length insert cDN	Seq ID No 170 & 338
	446341	AL040763	Hs.310735	FGFRESH prediction similar to multidrug	Seq ID No 171 & 339
	446341	AL040763	Hs.310735	FGFRESH prediction similar to multidrug	Seq ID No 172 & 340
70	458079	AI796870	Hs.54277	Homo sapiens similar to RIKEN cDNA 28100	Seq ID No 173 & 341
	415668	AW957684	Hs.306814	Homo sapiens lysyl oxidase-like 4 (LOXL4	Seq ID No 174 & 342
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	Seq ID No 175 & 343
	447674	BE270640	Hs.19192	cyclin-dependent kinase 2	Seq ID No 176 & 344
	440065	W03476	Hs.266331	Homo sapiens Fc receptor homolog express	Seq ID No 177 & 345
75	414945	BE076358	Hs.77667	lymphocyte antigen 6 complex, locus E	Seq ID No 178 & 346
	440672	AF083811	Hs.7345	MAD1 (mitotic arrest deficient, yeast, h	Seq ID No 179 & 347
	412609	Z48804	Hs.74124	ocular albinism 1 (Nettleship-Falls)	Seq ID No 180 & 348
	453837	AL138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	Seq ID No 181 & 349
	453837	AL138387	Hs.256126	baculoviral IAP repeat-containing 7 (liv	Seq ID No 182 & 350
80	434276	AF123659	Hs.93605	leucine zipper, putative tumor suppresso	Seq ID No 183 & 351
	408367	AK001178	Hs.44424	Homo sapiens orphan neurotransmitter tra	Seq ID No 184 & 352
	444809	BE207568	Hs.208219	oculopain	Seq ID No 185 & 353
	415929	AA724373	Hs.304950	Homo sapiens mucopolin-3 (MCOLN3)	Seq ID No 186 & 354
	421666	AL035250	Hs.1408	endothelin 3	Seq ID No 187 & 355

424321	W74048	Hs.1765	lymphocyte-specific protein tyrosine kin	Seq ID No 188 & 356
425535	AB007937	Hs.158287	syndecan 3	Seq ID No 189 & 357
451537	R56631	Hs.26550	retinoid X receptor, gamma	Seq ID No 190 & 358
430280	AA361258	Hs.237858	interleukin 7 receptor	Seq ID No 191 & 359
418064	BE387287	Hs.83384	S100 calcium-binding protein, beta (neur	Seq ID No 192 & 360
448610	NM_006157	Hs.21602	nel (chicken)-like 1	Seq ID No 193 & 361
432800	BE391046	Hs.278952	AIM-1 protein	Seq ID No 194 & 362
416350	AF188625	Hs.189507	phospholipase A2, group IID	Seq ID No 195 & 363
405545			Target Exon	Seq ID No 196 & 364
414812	X72755	Hs.77367	monokine induced by gamma interferon	Seq ID No 197 & 365
432874	W94322	Hs.279651	melanoma inhibitory activity	Seq ID No 198 & 366

Table 68 lists sequences as described in Table 67

Seq ID NO: 1	DNA sequence	
Nucleic Acid Accession #:	NM_002421.2	
Coding sequence:	1..1409	
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20	31	41
25	51	
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Seq ID NO: 2 DNA sequence  
Nucleic Acid Accession #: NM\_002421.2  
Coding sequence: 1..1409

1	11	21	31	41	51
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Seq ID NO: 3 DNA sequence  
Nucleic Acid Accession #: NM\_002422.2  
Coding sequence: 64..1497

1	11	21	31	41	51
80					

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	Nucleic Acid Accession #: NM_001854										
	Coding sequence: 162..5582										
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	TCGTGGGTTT	GAGTGTCCAG	TTGTGATGTC	GGGGCTCGGA	GATGGAGCCG	TGTCCTCTTA				180	
	GTGGGAAGAA	GAAACCGTAG	CTCTGGGATT	TACCGGTAA	AAACCTCGCA	TGACCTCTCC				240	
	TCCTTCAAGC	TAGAGAGGTG	AGAGGAGCTG	CTCCAGTTGA	TGTACTAAAA	CAGCTAGATT				300	
	TTCACAATT	TCCAGAGGGA	ATATCAAAAA	CAACGGGATT	TTGCACAAAT	AGAAAGATT				360	
40	CTAAGAGCTC	AGATACTGCT	TACAGAGTTT	CAAAGCAAGC	ACAACTCAGT	CCCCCAACAA				420	
	ACAGATTATT	TCCAGGTGGA	AGATTTCCAG	AGAACTTTTC	AATACTATT	ACAGTAAAAA				480	
	CAAAAAGGAG	AATTCACTGT	TTCTTTTAT	CTATATATA	TGAGCATGGT	ATTCCAGAAA				540	
	TGTGTTTGA	GGTTGGGAGA	TCACCTGTT	TTCTGTTGA	AGACCAACT	GGAAATCTGT				600	
	CCCCAGAGA	CTATCCCTCT	TTCAGAACT	TAAACTGCT	TGACGGGAAG	TGGACTCGGG				660	
	TAGCAATCAG	CGTGGAGAAG	AAATCTGTGA	CAATGATTGT	TGATTGTAAG	AAGAAAACCA				720	
	CGAAACCACT	TGATGAAGT	GAGAGACAGA	TTGTTGATAC	CAATGGAACT	AGCGTTTTCG				780	
	GAACACAGAT	TTTGATGAA	GAAATTTTGT	AGGGGACAT	TCAAGCAGTT	TGTATCAGAC				840	
	GTGATCCCAA	GGGCACATAT	CACTACTGTG	AGCATATAG	TCCAGACTGT	GACTCTTCAG				900	
50	ACCCCAAGGC	TGCTCAAGCT	GAGGAACCTC	AGATAGATGA	GTATGCACCA	GAGGATATAA				960	
	TGGAATATGA	CTATGAGTAT	GGGGAGAGAG	AGTATAAAGA	GGCTGAAAGT	GTAACAGAGG				1020	
	GACCCACTGT	AACCTAGGAG	ACAAATAGCA	AGACGGAGGC	AAACATCGTT	GATGATTTTC				1080	
	AAGAATACAA	CTGTGAACAA	ATGAAAGATT	ACCAAGACGA	AGCTCCTAGT	CATGTTTCTG				1140	
	GGACAATAGA	GCCAAATCCA	GTTGAGAGAA	TATTACTGTA	AGAAATATCTA	ACCGGAGAGG				1200	
	ATTATGATTC	CACGAGGAAA	AATTTCTGAG	ATACACTGTA	TGAAAACAAA	GAAATAGACT				1260	
55	CGAGGAGATC	TGATCTTTGA	GTAGATGAGT	ATTTAGGCCA	ATATGATCTA	TATGAATATA				1320	
	AGAATATGTA	GATAAATCAA	ACAAAGCCCT	CTAATGAAGA	ATTGTGCTCA	GGGTGTACAG				1380	
	CAGAAACTGA	TATTACAGAA	ACAAAGCTAA	ATTGCCCATG	TGCAATATGA	GAGAAAGAGC				1440	
	AGAAAGGAGA	ACCAGCAGTG	GTTGAGCCCT	GTATGCTTGT	CGAAGGACCA	CCAGGACACG				1500	
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60	ACCTTGGCGA	TAGGGGCCCC	CCAGGACGTC	AGGCTTATAC	AGGGGCTGAT	GGCTTACCTG				1620	
	GTCTCTCTGG	TACTATGTTG	ATGTTACCGT	TCGTTATATG	TGGTAGATGT	TCCAAAGAGC				1680	
	CAACCATCTC	TCTCAGGAA	GCTCAGGCTA	AACTATTCTT	TCAGCAGGCT	CGGATGTGCT				1740	
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	GAGAGAGAT	GGCGAGAGAA	CTCTGGGCCA	AGGGAGATGT	AGGGTTTGAT	GGACTTCCGG				1980	
	GTCTGCCAGG	TGACAAGAGT	CACAGGGGTG	AAGAGGTGCT	TCAAGTCTCT	CTCAGGCTCT				2040	
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	GTATGCGAGG	TGTAGATGGC	CCCCCAGAGC	CAAAAGGGAA	CATGGTCTCC	CAAGGGGAGC				2220	
	CAGGCGCTCC	AGGTCAACAA	GGGAATCCAG	GACCTCAGGG	TCTTCTGGTG	CCACAGAGCT					

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Nucleic Acid Accession #: Eos sequence  
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 Nucleic Acid Accession #: Eos sequence  
 Coding sequence: 1..5001

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Seq ID NO: 8 DNA Sequence  
Nucleic Acid Accession #: NM\_014244  
Coding sequence: 1..3636

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Seq ID NO: 9 DNA sequence  
Nucleic Acid Accession #: NM\_024022  
Coding sequence: 202..1563

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Seq ID NO: 10 DNA Sequence

Nucleic Acid Accession #: AK092195

Coding sequence: 1..2034

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Seq ID NO: 11 DNA Sequence

Nucleic Acid Accession #: NM\_032044

Coding sequence: 182..658

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Seq ID NO: 12 DNA Sequence

Nucleic Acid Accession #: XM\_051860.2

Coding sequence: 261..4346

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TGAAGATGG	GATGCCATT	GCTACAACCC	ACACGCAAG	GAGTGTGGTG	GGCTCTTTAC	480
AGATCCAAAG	CAAAATTTTA	AATCTCCAGG	CTTCCCAAAT	GAGTACGAAG	ATAACCAAT	540
CTGCTACTGG	CACATTAGAC	TCAAGTATGG	TCAGCGTATT	CACCTGAGTT	TTTTAGATT	600
TGACCTTGAA	GATGACCCAG	GTTGCTGGC	TGATTATGTT	GAAATATATG	ACAGTTACGA	660
TGATGTCCAT	GGCTTTGGGG	GAAGATACTG	TGGAGATGAG	CTTCCAGATG	ACATCATCAG	720
TACAGGAAAT	GTCATGACCT	TGAAGTTTCT	AAGTGATGCT	TCAGTGACAG	CTGGAGGTTT	780
CCAAATCAAA	TATGTTGCAA	TGGATCTGT	ATCCAAATCC	AGTCAAGGAA	AAAATACAG	840
TACTACTTCT	ACTGGAAATA	AAAACTTTT	AGCTGGAAGA	TTTAGCCACT	TATAAAAAAA	900
AAAAAAGGA	TGATCAAAAC	ACACAGTGTT	TATGTTGGAA	TCTTTTGGAA	CTCCTTTGAT	960
CTCACTGTTA	TTATTACAT	TTATTATTA	TTTTTCTAAA	TGTGAAAGCA	ATACATAATT	1020
TAGGGAATAA	TGGAAATAT	AGGAACTTT	AAACGAGAAA	ATGAAACCTC	TCATAATCCC	1080
ACTGCATAGA	AATAACAGC	GTTAACATT	TCATATTTTT	TTCTTTCAGT	CATTTTCTTA	1140
TTTGTGGTAT	ATGTATATAT	GTACCTATAT	GTATTTGCAT	TTGAAATTTT	GGAACTCTGC	1200
TCTATGTACA	GTTTTGTATT	ATACTTTTAA	AATCTTGAAC	TTTATAAACA	TTTTCTGAAA	1260
TCATTGATTA	TTCTACAAAA	ACATGATTTT	AAACAGCTGT	AAAATATTCT	ATGATATGAA	1320
TGTTTTATGC	ATTATTTAAG	CTGTCTCTA	TGTTTGGAA	TTGAGGTCA	TTTCATAAAT	1380
ATTGTTGCAA	TAAATATCCT	TGAACACACA	AAAAAAAAAA	AA		

Seq ID NO: 18 DNA sequence  
Nucleic Acid Accession #: NM\_007115.1  
Coding sequence: 69..902

1	11	21	31	41	51	
GAATTCGCAC	TGCTCTGAGA	ATTGTGAGC	AGCCCTTAAC	AGGCTGTTAC	TTCACTACAA	60
CTGACGATAT	GATCATCTTA	ATTACTTAT	TTCTCTTGCT	ATGGGAAGAC	ACTCAAGGAT	120
GGGGATTCAA	GGATGGAATT	TTTCATAACT	CCATATGGCT	TGAACGAGCA	GCCGGTGTGT	180
ACCACAGAGA	AGCAAGGCT	GGCAAAATCA	AGCTCACTTA	CGCAGAAAGT	AAGGCGGTGT	240
GTGAATTTGA	AGGCGGCCAT	CTCGCAACTT	ACAAGCAGCT	AGAGGCAGCC	AGAAAAATTG	300
GATTTTCATG	CTGTGCTGCT	GGATGGATGG	CTAAGGGCAG	AGTTGGATAC	CCCAATTGTA	360
AGCCAGGGCC	CAACTGATGA	TTTGGAAAAA	CTGGCATTAT	TGATTATGGA	ATCCGTCTCA	420
ATAGGAGTGA	AGATGGGAT	GCCTATTGCT	ACAACCCACA	CGCAAGGAG	TGTGGTGGCG	480
TCTTTACAGA	TCCAAAGCGA	ATTTTAAAT	CTCCAGGCTT	CCCAATGAG	TACGAAGATA	540
ACCAAACTCG	CTACTGGCAC	ATTAGACTCA	AGTATGGTCA	CGGTATTTCAC	CTGAGTTT	600
TAGATTTTGA	CCTTGAAGAT	GACCCAGGTT	GCTTGGCTGA	TTATGTTGAA	ATATATGACA	660
GTTACGATGA	TGTCCATGGC	TTTGTGGGAA	GATACGTGGS	AGATGAGCTT	CCAGATGACA	720
TCATCAGTAG	AGGAAATGTC	ATGACCTTGA	AGTTTCTAAG	TGATGCTTCA	GTGACAGCTG	780
GAGGTTTCCA	AATCAAAAT	GTTGCAATGG	ATCCTGTATC	CAAAATCCAGT	CAAGGAAAAA	840
ATACAAGTAC	TACTTCTACT	GGAAATAAAA	ACTTTTATGC	TGGAAGATT	AGCCACTTAT	900
AAAAAAAAAA	AAGGATGATC	AAAAACACACA	GTGTTATGT	TGGAATCTTT	TGGAATCTCT	960
TTGATCTCAC	TGTTATTATT	AACATTATT	TATTATTTT	CTAAATGTGA	AAGAAATACA	1020
TAATTTAGGG	AAAAATTGAA	AATATAGGAA	ACTTTAAACG	AGAAAAATGAA	ACCTCTCATA	1080
ATCCCACTGC	ATAGAAATAA	CAAGCGTTAA	CATTTTCATA	TTTTTTCTT	TCAGTCAATT	1140
TTGTATTGTG	GGTATATGTA	TATATGTACC	TATATGTATT	TGCATTGAAA	ATTTTGGAA	1200
CTGCTCTAT	GTACAGTTTT	GTATTATACT	TTTTAAATCT	TGAACCTTAT	GAACATTTTC	1260
TGAAATCAT	GATTATTCTA	CAAAACATG	ATTTTAAACA	GCTGTAAAAAT	ATTTCTATGAT	1320
ATGAATGTT	TATGATTAT	TTAAGCCTGT	CTCTATTGTT	GGAAATTCAG	GTCAATTTCA	1380
TAAATATTGT	TGCAATAAAT	ATCCTTCGGA	ATTC			

Seq ID NO: 19 DNA Sequence  
Nucleic Acid Accession #: NM\_006398.1  
Coding sequence: 19..516

1	11	21	31	41	51	

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Seq ID NO: 20 DNA Sequence  
Nucleic Acid Accession #: NM\_002358.2  
Coding sequence: 75..692

1 11 21 31 41 51  
GGGAAGTGCT GTTGAGCCG CTGTGTTGC GTGCGGGA GTGGAAGGCG GTGCTTTTGT 60  
TTGTGTCCCT GGCCATGGGG CTGCAGCTCT CCGGGGAGCA GGGAATCACC CTGCGGGGA 120  
GGCGCGAAAT CGTGGCCGAG TTCTTCTCAT TCGGCATCAA CAGCATTTTA TATCAGCGTG 180  
GCATATATCC ATCTGAAGCC TTACTCGAG TGCAGAAATA CGGACTCACC TTGCTTGTAA 240  
CTACTGATCT TGAGCTCAT AATACCTTAA ATAATGTGGT GGAACAACCTG AAGATTGGT 300  
TATACAAGTG TTCAGTTTCA AACTGGTTG TAGTTATCTC AATATTGAA AGTGGTGAGG 360  
TCCTGGAAAG ATGCGAGTTT GATATTGAGT GTGACAAGAC TGCAAAAGAT GACAGTGAC 420  
CCAGAGAAAA GTCTCAGAAA GCTATCCAGG ATGAAATCCG TTCAGTGATC AGACAGATCA 480  
CAGCTACGGT GACATTTCGT CCACGTGTGG AAGTTTCTTG TTCAATTGAT CTGCTGATTT 540  
ATACAGACAA AGATTGGTGT GTACCTGAAA AATGGGAAGA GTGCGGACCA CAGTTTATTA 600  
CCAATTCTGA GGAAGTCGCG CTTGTTTCA TTTACTACT AATCCACAAA GTAAATAGCA 660  
TGGTGGCCTA CAAATTTCTT GTCAATGACT GAGGATGACA TGAGGAAAAT AATGTAATTG 720  
TAAATTTGAA ATGTGGTTTT CTGAAATCA GGTCACTAT AGTTGATATG TTTTATTTC 780  
TTGGTTAAIT TTACATGGA GAAACCAAA ATGATACTTA CTGAACCTGTG TGTAAATGTT 840  
CCTTTATTTT TTGGTACCT ATTTGACTTA CCATGGAGTT AACATCATGA ATTTATTGCA 900  
CATTTGTTCAA AAGGAACGAG GAGGTTTTTT TGTCACACAT GTGATGTATA TTCCTTTGAA 960  
GATAGTAAGT GTAGATGGAA AACTTTGTC TATAAAGCTA GATGCTTTCC TAAATCAGAT 1020  
GTTTTGGTCA AGTAGTTTGA CTCAGTATAG GTAGGGAGAT ATTTAAGTAT AAAATACAAC 1080  
AAGGAAGTC TAAATATTCA GAATCTTTGT TAAGGTCTGT AAGATACTC ATAATCTATA 1140  
AACAAATGAA TATTGCTGTA TAGCTCCTTT TGACCTTCAT TTCAATGTATA GTTTCCCTA 1200  
TTGAATCAGT TTCAATATAT TTGACTTTAA TTTATGTAA TGAACCTAT GAAGCAATGG 1260  
ATATTTGTAC GTTTTAAATG TCTGTGATAC AGAATCTTA AAAATGTTTT TCCATGTGTT 1320  
TTATAAAATC AAGTTTAAATG TGAAGTGAG GAAATAAAGT TAAGTTTGT TTAATAAAAA 1380  
AAAAAATAA 1390

Seq ID NO: 21 DNA sequence  
Nucleic Acid Accession #: NM\_001898.1  
Coding sequence: 57..482

1 11 21 31 41 51  
GGCTCTCACC CTCTCTCCT GCAGCTCCAG CTTGTGCTC TGCCCTCTGAG GAGACCATGG 60  
CCAGTATCT GAGTACCTG CTGCTCTGCG TGGCCACCT AGCTGTGGCC CTGGCTCGGA 120  
GCCCAAGGA GGAGGATAGG ATAATCCGG GTGGCATCTA TAACGCAGAC CTCATGATG 180  
AGTGGGTACA GGTGGCCTT CACTTGGCCA TCAGCGAGTA TAAACAGGC ACCAAGATG 240  
ACTACTACAG AGTCCGCTG CGGTACTTAA GAGCCAGGCA ACAGACCGTT GGGGGGTGA 300  
ATTACTTCTT CGAGGTAGAG GTGGGCGGCA CCATATGTAC CAAGTCCAG CCCAATCTGG 360  
ACACCTGTGC CTTCATGAA CAGCCAGAAC TGCAGAGAA ACAGTTGTGC TCTTTCGAGA 420  
TCTACGAGT TCCCTGGGAG AACAGAAAGT CCCTGGTGA ATCCAGGTGT CAAGAATCCT 480  
AGGGATCTGT GCCAGGCCAT TCGCACACAG CACCAACCCAC TCCACCCCC TGTAGTGCTC 540  
CCACCCCTGG ACTGGTGGCC CCCACCTGCG GGGAGGCTTC CCGATGTGCC TGCSCCAAGA 600  
GACAGCAGA GAAGGTGCA GGAGTCTTT GTTGCTCAGC AGGGCGCTCT GCCCTCCCTC 660  
CTTCTTCTT GCTTCTAATA GCCCTGTGAC ATGGTACACA CCCCACACC TCCTGCAATT 720  
AAACAGTAGC ATGCC

Seq ID NO: 22 DNA sequence  
Nucleic Acid Accession #: NM\_007231.1  
Coding sequence: 89..2017

1 11 21 31 41 51  
TAGGAACAGG GGAGAGTGCA CCGCTACCA GTCAAGCTCA GCCAGACTGC AAGAGGAGGC 60  
GAGGCGGAGC CAGCCGAGG AGTGAACCAT GGACAAGTTG AAATGCCCGA GTTTCCTCAA 120  
GTGCAAGGAG AAGGAGAAAG TGTGGCTTC ATCAGAGAT TTCCATGTTG GTGAAAATGA 180  
TGAGAAATCA GACCGTGGTA ACTGGTCCAA AAAATCGGAT TATCTTCTAT CTATGATTGG 240  
ATACGCAAGT GGATTAGGAA ATGTGTGGAG ATTTCCATAT CTGACCTACA GCAATGTTGG 300  
AGGCGCTTTC TTGATACCTT ATGCAATTAT GTTAGCATG GCTGGTTTAC CTTTGTCTT 360  
TCTGGAGTGT TCACTGGGAC AATTGCTAG CTTAGGTCCA GTTTCAGTTT GGAGGATCT 420  
TCCATTGTTT CAAGGTGTGG GAATTACAAT GGTCTGATC TCCATTTTTG TGACAATCTA 480  
TTACAATGTC ATAATTGCT ATAGTCTTTA CTACATGTTT GCTTCTTTTC AAAGTGAACT 540  
ACCATGGAAG AATTGTTCTT CGTGGTCAGA TAAAACTGT AGCAGATCAC CAATAGTAAC 600  
TCACTGTAAT GTGAGTACAG TGAATAAAGG AATACAAGAG ATCATCCAAA TGAATAAAG 660  
CTGGGTAGAC ATCAACAATT TTACCTGCAT CAACGGCAGT GAAATTTATC AGCCAGGGCA 720  
GCTTCCAGT GAACAATATT GGAATAAAGT GGGCTCCAA CGGTCAAGTG GAATGAATGA 780  
GACTGGAGTA ATGTTTGGT ATTTAGCACT TTGTCTCTT CTGGCTTGGC TCATAGTTGG 840  
AGCAGCACTA TTTAAAGGAA TCAATCGTC TGGCAAGGTG GTATATTTTA CAGCTCTTT 900  
CCCTATGTG GTCTACTCA TCCTGTTAGT ACAGAGTGCA ACTCTGGAGG GTGCTTCAA 960

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AGGCATTCA TACTATATTG GAGCCAGTC AAATTTTACA AAACCTAAGG AAGCTGAGGT 1020  
ATGGAAAGAT GCTGCCACTC AGATATTTTA CTCCCTTTCA GTGGCTTGGG GTGGCTTAGT 1080  
TGCTCTATCA TCTTACAATA AGTTCAAAAA CAACCTGCTTC TCTGATGCCA TTGTGGTTTG 1140  
TTTGACAAC TGCTCTACTA GCGTGTGTGC TGGATTTGCT ATTTTCTCTA TATTGGGACA 1200  
CATGGCCCAT ATATCTGGAA AGGAAGTTTC TCAAGTTGTA AAATCAGGTT TTGATTTGGC 1260  
ATTGATTGCC TATCCAGAGG CTCTAGCCCA ACTCCAGGT GGTCCATTTT GGTCCATATT 1320  
ATTTTTTTTC ATGCTTTTAA CTTTGGGTCT CGATTCTCAG TTTGCTTGA TTGAAACGAT 1380  
CACAAACAACA ATTCAGGATT TATTTCCCAA AGTGATGAAG AAAATGAGGG TTCCCAATAC 1440  
TTTGGGCTGC TGCTTGGTTT TGTTCCTCTC TGGTCTGCTC TGTGTGACTC AGGCTGGAAT 1500  
TTACTGGGTT CATCTGATTG ACCACTTCTG TGGTGGATGG GGCATTTTAA TTGCAGCTAT 1560  
ACTGGAGCTA GTTGAATCA TCTGGATTA TGGAGGGAAC AGATTCATTG AGGATACAGA 1620  
AATGATGATT GGAGCAAGA GGTGGATATT CTGGCTATGG TGGAGAGCTT GCTGGTTTGT 1680  
AATTACGGCT ATCCTTTTGA TTGCAATATT TATCTGGTCA TTGGTGAAT TTCAATAGACC 1740  
TAATTATGGC GCAATTCAT ACCTGACTG GGGAGTTGCT TTAGGCTGGT GTATGATTGT 1800  
TTTCTGCATT ATTTGGATAC CAATTATGGC TATCATAAAA ATAATTCAGG CTAAAGGAAA 1860  
CATCTTTCAA CGCCTTATA GTTGCTGCAG ACCAGCTTCT AACTGGGGTC CATACCTGGA 1920  
ACAACTGCT GGGGAAAGAT ATAAAGACAT GGTAGATCCT AAAAAAGAGG CTGACCATGA 1980  
AATACCTACT GTTAGTGCCA GCAGAAAAAC GGAATGAGAT CTCATTGAAA AAAATATATG 2040  
ATTGATATAT GTGATTTTTT TTAGAATAGG GGGAACTTAA TTTATTTGTG TGTAACTGA 2100  
ATAGGAAAT GTACATACTA TGTTCATGAT AGTGTGATTT TTTTCACATT TAAGCAGGAA 2160  
TGCAATATAA AAATGTGAAT CTCTTAATTC TCAGCCATGT GCTTATTATA TTTCTTTTAA 2220  
GATTGTCTAT CTGTATAACA CACACACACA CACCTAAGAG TCTCTATTTC ACAATTATAT 2280  
TTTTGATAAT AGTATATGCA TTTTAAATAC ATTGGAGGCT TTATTTTGAA CTAATTTCTT 2340  
AGAGAAATAG TATATTTTCT ATTACACNAG TTTAAAAATA TTATTAACCT GTATTTTCTT 2400  
AATATACAAT CTATCTTTTC CACAAATATG AGTGGGAAAT AAATCAGCAC ATTTGAAAGA 2460  
AAGTGTAAAT ACTGAAGGCC TCACCTTAAT AGAAACGTGA TAAATATATG GACAAATGGA 2520  
CTATACATAC TATAAGAGGA CTGTAGTTTA ATACTTTTAA CCCAAATATG TTTAAAAACA 2580  
TCGTGCATT GTTACAGCTC ATGTTTTCTA TATGAACCTA GTCAATTAATG TTTCTTATAA 2640  
AAAGTGAAT AGATGGAAA AATTAGGATC CTACAGCCAG TACGTGATAA ATCTAGAAAA 2700  
TTAGGTTTTG AGTACCTCTT TTCCCATATA CAATCTTCTC TCCTTAGGTA ATTTGGAAGA 2760  
AACTATGAC CCAATTAATT TCTATTGTGT TTCAACCAAT TCAGTGTGTG TCATTATACC 2820  
TCTCTGAAAT ATAGGTTTAA TTCAAAATAG AATATGGACT TAAATGTTAA TGAGAAACTG 2880  
GCTTTAATCA ATTCATAGCAT TTTATTACTG TAATACAGGG CTGATAGAGT GATTTTGTCT 2940  
TATATGAGTC AGTTACTACT TACAGGTGAT AACTTGCATA CTATTGGAAG ATAAAGTTGT 3000  
CAAACTTGT CAAAGTGAAG AAGGCCAAAT TAGAAAAATC TATGTCTAG TTTCTTACC 3060  
AAGGATAATT AAATATATCA CTAAGAGCTT TATATATTGA TTATATATTG TTGACAACTG 3120  
GTTTAAGCAT CATAGCTAT GATGATAAAC ACTGCCATA TATGTAATA GCTTTTCTATC 3180  
AATCTTAAAT TTTCTTAACT TAGGCTTCAG GGAGCATATG AAACCAAAAT TATATGGAAC 3240  
ATTTCTGTG TGTACATGTA CATGCATTTT TCTAGGGAGA GAGTCCGTAG GTTTATCAGA 3300  
ATATCAGGAA AAACCTGTG CCAAGAAAGT TTAAGAAATCA CATACAGTGC TGCTGGCTTT 3360  
TTGTGCTTGG CAAATAGAGT ACAATAGAAG AAATAATTTT TCTTACACAT TTTAAACGTT 3420  
TTTCTCTTCC TTGTGATTGA AGATGAAGG AGTAAGAAAT TAAGGCATTT GTTTAATTTA 3480  
TACTGTAAC TTATTTAGGG GGGAGGGGAC ATGAAGTAG GTAATAGGT AGGCCTCTAA 3540  
TTGAACCACT TCTCTAAGTT ATGTACGTAT ATATAAGCTG AAATGTGTT TGACATTCTG 3600  
AGGGTTTTCT TTTTCTTTT CTTTCTTTT TTTTCTTGT GGGGGGCTGG GGGTCAAGAT 3660  
CTTGTCTGT TGCCTGGGCT GGAGTGCACT GGCATGATCT CAGCTCACTG CAACCTCTGC 3720  
CTTCTGGATT CAAGTGAATC TCCTGCCTCA GCCTCTTGAG TAGCTGGGAC TACAGTGCC 3780  
CGCCACCAACA CCACTTAATT TTTGATTTT TAGTAGAGGC GAAATTTTCC CATGTGGGCC 3840  
AGCTGGCTGT TGAATCCCG ACCTCAAGTG ATCTGTCTAC CTGCGCTCC TAAAGTGCTG 3900  
AGATTACAGG TGTGAGCCAC CGTGCCCGCC CCATTCTAAG GGTTTTCTTT GAAGACAGGT 3960  
CAAATGCTGT TAGTAAGTTT CAGGAGATTG TTAATCTCTC AGTTATACCA GATTTTATAA 4020  
AATATTTGAG AATAGATGGC TAACAAGAGG TTAGAATATC TTTTCTTAA TTTAATCCA 4080  
CAGTATGTTA CATGCATTCT ACCACTACAT TTTGGTGCTA TTTAAGTGT GCAATTTTCT 4140  
ATAGGTGACT TTTGCAATTC AGGGAAGATT TGGGCATATT AAATGAAAGA ATATCTAATT 4200  
GGGGGAGGTG TGAAGGGAAG GAAATTTCTT TCAAAAGCTG ACCACAAAGA GTAGTTAAAA 4260  
GTTTTGTGCA CTATCTTAC AAGTGTGTAA AGCAGAGATT TCAACAGAGT GCTTGGCATA 4320  
TTGTAGGGTG CTCATAGGTG GTTTTATTA TTATTACTCA GATTCCACAG TGGCAAGAAA 4380  
CATCATTTCA CATATGGAA AACATTACA TCAAAATCCA CTACTTTAA TGGCAACTTG 4440  
GAGATAAATT ATGGATTGTG ATTTGAAACC ATTAATGAAA ACTTTTTTAC AGTTGAGTGA 4500  
AATTAATCT ACTATATCTC

Seq ID NO: 23 DNA sequence  
Nucleic Acid Accession #: NM\_006398.1  
Coding sequence: 19..516

65  
70  
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1 11 21 31 41 51  
GGCCCCCTGT CTGCAGAGAT GGCTCCCAAT GCTTCCTGCC TCTGTGTGCA TGTCCGTTC 60  
GAGGAATGGG ATTTAATGAC CTTTGATGCC AACCCATATG ACAGCGTGAA AAAAAACAAA 120  
GAACATGCTC GGTCTAAGAC CAAGGTTCTC GTGCAGGACC AGGTCTTTT GCTGGGCTCC 180  
AAGATCTTAA AGCCACGGAG AAGCCTCTCA TCTTATGGCA TTGACAAAGA GAAGACCATC 240  
CACCTTACCC TGAAGTGGT GAAGCCCACT GATGAGGAGC TGCCCTTGT TCTTGTGGAG 300  
TCAGGTGATG AGGCAAGAG GCACCTCTCT CAGGTGCGAA GGTCCAGCTC AGTGGCACAA 360  
GTGAAGCAAA TGATCGAGAC TAAGACGGGT ATAATCCCTG AGACCCAGAT TGTGACTTGC 420  
AATGGAAGA GACTGGAAGA TGGGAAGATG ATGGCAGATT ACGGCATCAG AAAGGGCAAC 480  
TTACTCTTCC TGGCATCTTA TTGTATTGGA GGGTGACCAC CCGTGGGATG GGGTGTGGC 540  
AGGGGTCAAA AAGCTTATTT CTTTAAATCT CTACTCAAC GAACACATCT TCTGATGATT 600  
TCCCAAAATT AATGAGAATG AGATGAGTAG AGTAAGATT GGGTGGGATG GGTAGGATGA 660  
AGTATATTGC CCAACTCTAT GTTCTTTGA TTCTAACACA ATTAATTAAAG TGACATGATT 720  
TTTACTAATG TATTACTGAG ACTAGTAAAT AAATTTTAA GGCAAAATAG AGCATTCT

Seq ID NO: 24 DNA sequence  
Nucleic Acid Accession #: XM\_094741.1  
Coding sequence: 1..948

1 11 21 31 41 51



	ATGAAGGCCA	ACTACAGCGC	AGAGGAGCGC	TTTCTCCTGC	TGGGTTTCTC	CGACTGGCCT	60
	TCCCTGCAGC	CGGTCTCTTT	CGCCCTTGTC	CTCCTGTGCT	ACCTCCTGAC	CTTGAAGGGC	120
	AACTCGGCGC	TGGTGCTGCT	GGCGGTGGCG	GACCCGCGCC	TGCACAGGCC	CATGTACTAC	180
5	TTCTCTGGCC	ACCTGGGCTT	GGTAGACGCG	GGCTTCACTA	CTAGCGTGGT	GCGCGCGCTG	240
	CTGGCCAACC	TGGCGGAGCC	AGCGCTCTGG	CTGGCGGCGA	GCCACTGCAC	GGCCAGAGCTG	300
	TGGCATCCGC	TGGCTCTGGG	TTGGGCGGAA	TGGGTCTCTC	TGGCGGTGAT	GGCTCTGGAC	360
	CGCGCGGCGC	CAGTGTGCGG	CCGCTGCGCC	TATGGGGGGC	TGCTCTCCCC	GGGCTATGTT	420
	CGCAGCTCGG	CCAGCGGCTC	CTGGCTAAGC	GGCTTCACTA	ACTCGGTGCG	GCAAAACCGCG	480
10	CTCTGGCTGG	AGCGGCGGCT	GTGGCGGCGC	CGCTGCTGGG	ACCACTTCAT	CTGTGAGCTG	540
	CGGGGCTTGC	TCAAGCTGGC	CTGGGAGGCG	GACGGAGACA	CTACCGAGAA	CCAGATGTTT	600
	GCGCGCGCGG	TGTCATCTCT	GCTGCTGCGG	TTTGGGTTCA	TCTGGGCTC	CTACGGTGCC	660
	GTGGGCGGAG	CTGTCTGTTG	CATGGGTTTC	AGCGGAGGCC	GGAGGAGGGC	GGTGGGCAAG	720
	TGTGGGCTCC	ACCTGACAGC	CGTCTGCTCG	TTCTACGGCT	CGGCCATCTA	CACCTACCTG	780
15	CAGCCCGCGC	AGCGCTACAA	CCAGGCACGG	GGCAAGTTGG	TATCGCTCTT	CTACACCGTG	840
	GTCAACACTG	CTCTCAACCC	GCTCATCTAC	ACCTCTAGGA	ATAAGAAAGT	GAAGGGGGCA	900
	GGAGGAGGCG	TGCTGGGAGG	TCTGGGAGGA	GGCCAGGCTG	GGCAGTGA		
	Seq ID NO: 25 DNA Sequence						
	Nucleic Acid Accession #: NM_018685.1						
	Coding sequence: 156..353						
	1	11	21	31	41	51	
	CTGGAAGCCG	AGAGGAGAGG	ACAGCTGGTT	GTGGGAGAGT	TCCCGCGCCT	CAGACTCCTG	60
25	GTTTTTCCCA	GGAGACACAC	TGAGCTGAGA	CTCACTTTTC	TCTTCTTGAA	TTTGAACCA	120
	CGTTTCAATC	GTCTCTGAGT	CGAGCGCCTG	GGGCGATGGA	TCCGTTTACG	GAGAAATGTC	180
	TGGAGCGAAG	CGGTGCGAGG	CGAGAGAAAT	TTGAGAGAAA	AATGGCTGAG	AGGCCCAAG	240
	CAGCTCCAAG	GTCTATGACT	CATGCTAAGC	GAGCTAGACA	GCCACTTTCA	GAAGCAAGTA	300
	ACCAGCAGCC	CCTCTCTGGT	GGTGAAGAGA	AATCTTGTAC	AAAACCATCG	CCATCAAAAA	360
30	AACGCTGTTC	TGACAACACT	GAAGTAGAAG	TTTCTAACTT	GGAAAAATAA	CAACCAAGTT	420
	AGTGCAGATC	TGCAAAATCT	TGTTCTCCAA	GTCTGTGCTC	TCTCAGGTG	CAGCCACAAG	480
	CAGCAGATAC	CATCAGTGAT	TCTGTGCTG	TCCCGGCATC	ACTGCTGGGC	ATGAGAGAG	540
	GGCTGAATC	AAGATTGGAA	GCAACTGCAG	CCTCTCAAGT	TAAACACAGT	ATGCAAAAC	600
	TTGAGAGACA	ACGGGCGCGT	TGGGATTAAT	ATGATATGAC	AGATGACATT	CCTGAAAGCT	660
35	CATCTTCTC	ACCAATGCCA	TCAGAGGAAA	AGGCTGCTTC	CCCTCCCAAA	CCTCTGCTTT	720
	CAATGCTCTC	GGCAACTCCA	GTGGGAGAAA	GGGGCGCTCT	GGCCAAATCT	GCTGCAACTA	780
	TTTGTCTCTG	GGAAGATGAT	GTAAATCACT	CATTGTGAAA	ACAAAACAGT	GTACAAAGAC	840
	AGCTGGTATC	CGCTTGTGTT	TCCAAATTTT	CCTCTGCAAG	TGGAGCATCT	GCTAGGATCA	900
	ATAGCAGACG	TGTTAAGCAG	GAAGCTACAT	TCTGTTCCCA	AAGGGATGGC	GATGCTCTT	960
40	TGAATAAAGC	CCTATCTCTA	AGTGTGATG	ATGGCTCTTT	GGTTAATGCC	TCAATTTCCA	1020
	GCTCTGTGAA	AGCTACTTCT	TCTCCAGTGA	AATCTACTAC	ATCTATCACT	GATGCTAATA	1080
	GTGTGAGGGG	ACAAAATCCT	GAGCTACTTC	CAAAAACCTC	TATTAGTCTT	CTGAAAACCG	1140
	GGGTATCGAA	ACCAATTTGT	AAGTCAACTT	TATCCAGAGC	AGTTCCATCC	AAGGGAGAA	1200
	TAAGTAGAGA	AATTGTCTGT	CAATCTCAAT	CTAAGAGACA	ATCTACGACA	CCAGGAGGAA	1260
45	CAGGAATTA	GGCTTCTCTG	GAAGCTTTTG	GAGAGCGTTG	TCAAGAACAT	AGCAAGAGAA	1320
	GTCCAGCTCG	TAGCAGACCC	CACAGAACCC	CCATTATTAC	TCCAAATACA	AAGGCCATCC	1380
	AAGAAGATT	ATTCAAGCAA	GACACATCTT	CATCTACTAC	CCATTAGACA	CAACAGTCA	1440
	AGCAGGAGAG	TCAAAAGAAA	CTAGCATGTC	TTGGTGGCGG	ATTTGACAAG	GGCAATATAT	1500
50	GGAGTCAGAA	AAAAGCGGGA	AACTCAAAAA	GCAAAACAAT	AGAAACCAAA	CAGGAACTCT	1560
	ACTGTGAGAG	CACTCCCCCTC	AAAAAACACC	AAGGTGTTTC	AAAAACTCAG	TCCTTCCAG	1620
	TAACAGAAAA	GGTAGCCGAA	AACAGATAC	CAGCCAAAAA	TTCTAGTACA	GAACCTAAAG	1680
	GTTCCTAGTA	ATGCGAAATG	ACGAAATCTA	GGCCTTTGAA	AATAACATG	TTTTTAGAAG	1740
	AGGCAAAATC	CTTAAAGATA	ACATCAGACC	CAAGGGTTGA	GCAGAAATTT	GAAGTGATAC	1800
	GTGAATGAT	TGATGAGTGT	GATGATGATG	ATATCAATAG	TTGCAAGATA	ATTAATGACC	1860
55	TTCTCAGTGA	TGTCCTAGAG	GAAGGTGAAC	TAGATATGGA	GAAGAGCCAA	GAGGAGATGG	1920
	ATCAAGCATT	AGCAGAAAGC	AGCGAAGAAC	AGGAAGATGC	ACTGAATATC	TCCTCAATGT	1980
	CTTTACTTGC	ACCATTGGCA	CAAAACAGTT	GTGTGGTAAG	TCCAGAGAGT	TGATGTGCTA	2040
	CACCTAGACT	GGAAATGAAA	GACACAGACA	GAAGTGATGA	AAGTCCAAAA	CCAGGAAAT	2100
	TCCAAAGAAC	TGCTGTCCCT	CGAGCTGAAT	CTGGTGATAG	CCTTGTTTCT	GAAGATCGTG	2160
60	ATCTTCTTTA	CAGCATTGAT	GCAATAGAT	CTCAAGATT	CAAGAAACA	GAAGTCCAT	2220
	CAATAAAGCA	GGTATTGTT	CGGAAGGAAG	ATGTACTTCT	AAAACCTGAT	GAAGAAATA	2280
	ATGCTTTTCC	TTGTCAAGTT	AATATCAAAC	AGAAATGCA	GGAACCTCAAT	AACGAATATA	2340
	ATATGCAACA	GACAGTGATC	TATCAAGCTA	GCCAGGCTCT	TAACTGCTGT	GTGATGAAG	2400
	AACATGGAAA	AGGGTCCCTA	GAAGAAGCTG	AAGCAGAAAG	ACTTCTTCTA	ATTGCAACTG	2460
65	GAAGAGAAC	ACTTTTGATT	GATGAATTGA	ATAAATTGAA	GAACGAAGGA	CCTCAGAGGA	2520
	AGAATAAGGC	TAGTCCCAAA	AGTGAATTTA	TGCCATCCAA	AGGATCAGTT	ACTTTGTCAG	2580
	AAATCCGCTT	GGCTCTAAAA	GCAGATTTTG	TCTGCAGTAC	GGTTCAGAAA	CCAGATGCAG	2640
	CAAAATTA	TTACTTAATT	ATACTAAAG	CAGGAGCTGA	AAATATGGTA	GCCACACCAT	2700
70	TAGCAAGTAC	TTCAAACTCT	CTTAACGGTG	ATGCTCTGAC	ATTCAGTACT	ACATTTACTC	2760
	TGCAAGATGT	ATCAATGAC	TTTGAATATA	ATATTGAAGT	TTACAGCTTG	GTGCAAAAGA	2820
	AAGATCCCTC	AGGCTTGAT	AAGAAGAAAA	AAACATCCAA	GTCCAAGGCT	ATTACTCCAA	2880
	AGCGACTCCT	CACATCTATA	ACCACAAAAA	GCAACATTCA	TTCTTCAGTC	ATGGCCAGTC	2940
	CAGGAGGTCT	TAGTGTCTGT	CGAACCAAGCA	ACTTGCCTCT	TGTTGATCT	TACACATTAT	3000
	CATTGTCTC	AGTAGGAAAT	ACTAAGTTTG	TTCTGGACAA	GGTCCCTTTT	TTATCTTCTT	3060
75	TGGAAGGTCA	TATTTATTTA	AAAAATAAAT	GTCAAGTGAA	TTCCAGTGTG	GAAGAAAGAG	3120
	GTTTTCTAAC	CATATTGAA	GATGTTAGTG	GTTTTGGTGC	CTGGCATCGA	AGATGGTGTG	3180
	TTCTTTCTGG	AAACTGTATA	TCTTATTGGA	CTTATCCAGA	TGATGAGAAA	CGCAAGAACT	3240
	CCTATGGAAG	GATAAATCTG	GCTAATTGTA	CCAGTCTGTA	GATAGAACCA	GCCACAGAG	3300
	AATTTTGTGC	AGAGCGCAAC	ACTTTTGAAT	TAATTACTGT	CCGACCAACA	AGAGAAGATG	3360
	ACCGAGAGAC	TCTTGTACGC	CAATGCAGGG	ACACACTCTG	TGTTACCAAG	AACCTGGCTGT	3420
	CTCGAGATAC	TAAAGAGAG	CGGGATCTCT	GGATGCAAAA	ACTCAATCAA	GTCTTTGTTG	3480
	ATATTGCGCT	CTGGCAACCT	GATGCTTGCT	ACAAACCTAT	TGGAAGCGCT	TAAACCGGGA	3540
	AATTTCCATG	CTATCTAGAG	GTTTTGTGAT	TCACTTTAAG	AAACACACTT	AAGAGCATAC	3600
80	GATTTACTGA	TTGCAATTTA	TGCTTAAAGT	ACGAAAGGTT	TTGTGCCAAT	ATTCACTACG	3660



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	TTCTTAGAAA	TCTAATATT	CAGTTATTCA	TGACAATATT	TTTTTAAAG	TAAGAAATTC	3840
	TGAGTTGTCT	TCTTGGAGCT	GTAGGCTCTG	AAGCAGCAAC	GTCTTTCAGG	GGTTGGAGAC	3900
5	AGAAACCCAT	TCTCAATCT	CAGTAGTTTT	TTGAAAGGC	TGTGATCATT	TATTGATCGT	3960
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	AGTAATGAGG	ATGAGAAGCT	TTTCAAATAG	CAATATATA	TTGGCTTAAA	GCATGAGGCT	4080
	GTCTTCAGAA	AAGTGATGTG	GACATAGGAG	GCAATGTGTG	AGACTTGGGG	GTTCATATT	4140
	TTATATAGAA	GAGTTAATAA	GCACATGGTT	TACATTTACT	CAGCTACTAT	ATATGCAAGT	4200
10	TGGTGACAT	TTTCACAGAA	TTCTGGCTTC	ATTAAGATCA	TTATTTTTGC	TGCGTAGCTT	4260
	ACAGACTTAG	CATATTAGTT	TTTCTACTC	CTACAAGTGT	AAATGAAAAA	ATCTTTATAT	4320
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	TTGGGTTTGT	TTGTGTTTGT	TTTGTGTTGT	TTGTTTGGT	TCATGAACAA	CAGTGTCTAG	4440
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15	AAATTTATTA	AAATTGTAA	AGCAGGCTCT	CAACTTTTAA	ATACACTTTG	AACTTCTCT	4560
	CTGAATTATT	AAAGTTCTTT	ATGACCTCAT	TTATAACAC	TAAATCTCTG	CACCTCCTGT	4620
	CATTTTATT	TTTATTCATT	CAATGTATT	TTTCTGTG	CATATTATAA	AAATATATT	4680
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	GGAAACTTA	CTTATTGGAT	CTACTTCATA	TGTAGAAGAA	GAGATGCCTC	AGATTGAAAC	180
	AAGAGTGATA	TGGTTCAAG	AAGCTGGAAA	ACAAGAAGAA	CTTATAAAG	CCTTAAAGGA	240
	CATTAAAGTG	GGCTTTGTAA	AGATGGAGTC	AGTGGAGAA	TTTGAAGGTT	TGGATTCTCC	300
30	GGAAATTGAA	AATGTATTGT	TAGTCAOGGA	CTTTCAGGAT	TCTGTCTTA	ATGACCTCTA	360
	CAAGGCTGAT	TGTAGAGTTA	TTGGACCACC	AGTTGTATTA	AATGTTTAC	AAAAAGGAGA	420
	GCCTTTGCCA	TTTTCATGTC	GCCGTTGTA	TTGTACAAGT	ATGATGAATC	TAGTACTATG	480
	CTTTACTGGA	TTTAGGAAAA	AAGAAGAACT	AGTCAGGTTG	GTGACATTGG	TCCATCAGAT	540
	GGGTGGAGTT	ATTCGAAAG	ACTTTAATTC	AAAAGTTACA	CATTTGGTGG	CAAATTGTAC	600
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	GATTATATAA	GCTTGGGAAA	GGCGGAATGA	ACAGGATTTT	TATGCAGCAG	TTGATGACTT	720
	TAGAAATGAA	TTTAAAGTTC	CTCCATTTCA	AGATTGTATT	TTAAGTTTCC	TGGGATTTTC	780
	AGATGAAGAG	AAAACCAATA	TGGAGAGAAAT	GACTGAAATG	CAAGGAGGTA	AATATTACC	840
	GCTTGAAGAT	GAAAGATGCA	CTCACCTGT	AGTTGAAGAG	AATATAGTAA	AGACTCTTCC	900
40	CTTTGAACCT	TCAAAGAAAC	TTTATGTTGT	CAAGCAAGAG	TGGTCTGGG	GAAGCATCA	960
	AATGATGCC	CGAGCTGGAG	AAACTATGTA	TTTATAGAA	AAGGCAATA	CTCCTGAGCT	1020
	CAAGAAATCA	GTGTCAATGC	TTTCTCTAAA	TACCCTTAAC	AGCAATGCGA	AACGAGCTCG	1080
	TTTAAAGAAA	ACACTTGCTC	AGCTTTCAAG	AGAGACAGAG	GTGTCAACAT	TTCCACCCCG	1140
	TAAGCGCCCA	TCAGCTGAGC	ATTCCCTTTC	CATAGGGTCA	CTCCTAGATA	TCTCCAACAC	1200
45	ACCAGATCT	AGCATTAAC	ATGGAGACAC	CCCAAGTCT	TGTACTAAGT	CTTCTAAAAG	1260
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	GGAAGAGGAA	GGACAAAGTG	GTGGACCTAT	CCTTGACCA	GAGGAGATTA	AGACTATTTT	1440
	TGGTAGCATC	CCAGATATCT	TGTATGTACA	CACTAAGATA	AAGGATGATC	TTGAAGACCT	1500
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	TAAATGTGAA	AAACGAAAC	CAAGATTCA	TGCTTTTCTC	AAGATAAAC	AAGCAAAACC	1680
	AGAATGTGGA	CGGCAGAGCC	TTGTGAAGT	TCTATCCGA	CCAGTACAGA	GGTTACCCAG	1740
	TGTTGCATTA	CTTTAAATG	ATCTTAAGAA	GCATACAGCT	GATGAAATC	CAGACAAAAG	1800
55	CACCTTAGAA	AAAGCTATTG	GATCACTGAA	GGAAGTAATG	ACGCATATTA	ATGAGGATAA	1860
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	TGAGCACCCC	TGTGACAGAG	GAGAACAGT	AACCTCTCTC	CTCTTCAATG	ATTGCTTAGA	2040
	GATAGCAAGA	AAACGGCACA	AGGTTATTGG	CACCTTTAGG	AGTCTCTCATG	GCCAAACCCG	2100
60	ACCCCAAGCT	TCTCTTAAGC	ATATTCACCT	AATGCTCTT	TCTCAGATTA	AGAAGGTATT	2160
	GGACATAAGA	GAGACAGAAG	ATTGCCATAA	TGCTTTTGCC	TTGCTTGTGA	GGCCACCAAC	2220
	AGAGCAGGCA	AATGTGCTAC	TCAGTTTCCA	GATGACATCA	GATGAACCTC	CAAAAGAAA	2280
	CTGGCTAAG	ATGCTGTGTC	GACATGTAGC	TAACACCAAT	TGTAAAGCAG	ATGCTGAGAA	2340
	TCTTATTAT	ACTGCTGATC	CAGAACTCTT	TGAAGTAAAT	ACAAAAGATA	TGACAGTAC	2400
65	ATTGAGTAGA	GCATCAAGAG	CAATAAAAAA	GACTTCAAAA	AAGGTTACAA	GAGCATTCTC	2460
	TTTCTCCA	ACTCCAAAAA	GAGCTCTTCG	AAGGGCTCTT	ATGACATCCC	ACGGCTCAGT	2520
	GAGGGAAGA	AGTCTTCCA	GCAATGATAA	GCATGTAATG	AGTCGTCTT	CTAGCACATC	2580
	ATCATTAGCA	GATATCCCTT	CTCCCTCCCT	TGTCAGCCTT	CCTTCTTCT	TTGAAAGGAG	2640
	AAGTCATACG	TTAAGTAGAT	CTACAATCA	TTTGATATGA	AGCGTTACCA	AAATCTTAAA	2700
70	TTATAGAAAT	GTATAGACAC	CTCATACTCA	AATAAGAAAC	TGACTTAAAT	GGTACTTSTA	2760
	ATTAGCACTT	GGTGAAAGCT	GGAAGGAGCA	TAAATAACAC	TAAACTATGC	TATTGTGATT	2820
	TTCTTCTTGA	AAGAGTAAGG	TTTACCTGTT	ACATTTTCAA	GTTAATTCAT	GTAATAAATT	2880
	ATAGTGATT	TGATGTAATT	TATCTCTTGT	TTGAATCTGT	CATTCAAAAG	CCAATAATTT	2940
	AAGTTGCTAT	CAGCTGATAT	TAGTAGCTTT	GCAACCCCTGA	TAGAGTAAAT	AAATTTTATG	3000
75	GGCGGGTGCC	AAATATGCT	GTGAATCTAT	TTGTATAGTA	TCCATGAATG	AATTTATGGA	3060
	AATFAGATATT	TGTGCGAGCTC	AATTTATGCA	GAGATTAAT	GACATCATAA	TACTGGATGA	3120
	AAACTTGCAT	AGAAATCTGA	TTAAATAGTG	GGTCTGTTTC	ACATGTGCAG	TTTGAAGTAT	3180
	TTAAATAACC	ACTCCTTTCA	CAGTTTATTT	TCTTCTCAAG	CGTTTTCAG	ATCTAGCATG	3240
80	TGGATTTTAA	AAGATTGACC	CTCAATTAACA	AGAATAACAT	TTAAAGGAGA	TTGTTTCAAA	3300
	ATATTTTTCG	AAATTGAGAT	AAGGACAGAA	AGATTGAGAA	ACATTGTATA	TTTTGCAAAA	3360
	ACAAGATGTT	TGTAGCTGTT	TCAGAGAGAG	TACGGTATAT	TTATGGTAAT	TTTATCCCAT	3420
	AGCAAACTCT	GATTTAGTTT	GATAGTGTGT	GGAATTTTAT	TTTGAAGGAT	AAGACCATGG	3480
	GAAATTTGTG	GTAAGAGCTG	TTTGTACCTT	TCATGAAATA	ATTCTGAAGT	TGCCATCATG	3540
	TTTACTAATC	TTCTGTGAAA	TGCATAGATA	TGCGCATGTT	CAACTTTTTA	TTGTGCTCT	3600

5 ATAATTAAT GTAAAAATGA AAATTCATT GCTGTTTCAA AGTGTGATAT CTTTCACAAT 3660  
AGCCTTTTIT TAGTCAGTAA TTCAGAAATA TCAAGTTCAT ATGGATAAAT GCATTTTITAT 3720  
TTCTATTTC TTTAGGAGAT GCTACAAATG TTTGTCACTT AAATTTCAAAG TTTCTGTTTT 3780  
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AAATGACTCT TTGCTACATT TTAAGAACAA TTGTATTAGT AAGAAGCTTG TAAATAAATA 3900  
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Seq ID NO: 27 DNA Sequence  
Nucleic Acid Accession #: NM\_002497.1  
Coding sequence: 135..1472

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CAGGCTCTTA CGGCGCTGC CAGAAGATCC GGAGGAAGAG TGATGGCAAG ATATTAGTTT 240  
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50 Seq ID NO: 28 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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80 Seq ID NO: 29 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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Seq ID NO: 30 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: ..817

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ACGATCAAC TTTAGCATG ACAGTGCAAG AGTTTTCATG CCCTCAACTT CACCAAAACC 720  
CAGCACAACC AATGTTTTCA CTCTGCTGT AGACCAAACT ATTACCCAG AGCTCCCGA 780  
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Seq ID NO: 31 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: ..917

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CACCTTTCTC TGGAAATTTA CAACAGCAGC AGCAGGCTCA AATTCACAGA CTCTCCAGT 300  
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AGCAGATACC ATTCTATGCT CAATTGGAT ACATTCCACA ACTAGCAGAA CCGTCTATAT 660  
CAGGAGGACA GCAGCAACTA GCTTTTGATC CCCAAGTAGG CACAGCTCCT GAAATTGCTG 720  
TGATGTCAAC AGGAGAAGAG ATACCATATT TACAAAAAGA AGCGATCAAC TTTAGACATG 780  
ACAGTGCAAG AGTTTTCATG CCCTCAACTT CACCAAAACC CAGCACAACC AATGTTTTCA 840  
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GCTAAGGGA ACCATAA 917

70

Seq ID NO: 32 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

1 11 21 31 41 51  
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GGTGTTTGAA GCAGAGAGAA GAGAAAGAG GCTTAGGTTA TACTGCTTAG AACCTCTCT 180  
TCACTAACC TACCGACCCA CCTACCCATA AATCCATAAC TACACACACA CCGCTTCTCT 240  
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TGCTCTGCC TACTCAGCTC CTGAACTGA GGTGAAAT GAGACCCAGA GGAATGGGAT 360  
TTACAGCTTC TGCTTTCTT CTGCTTGT CCTAGAACTG AAGTACAAAT GGAAGAAGC 420  
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CAGTTCA 488

Seq ID NO: 33 DNA Sequence

Nucleic Acid Accession #: Eos sequence

1 11 21 31 41 51

5 CTCCAGAGT GCTAGGATTA CAGGCATGAG CCACTGCTCC CAGCCTTCCA GAGGAATTTT 60  
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Seq ID NO: 34 DNA Sequence  
Nucleic Acid Accession #: NM\_003979.2  
Coding sequence: 254..1357

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Seq ID NO: 35 DNA Sequence  
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 Coding sequence: 1..4203

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Seq ID NO: 36 DNA Sequence  
Nucleic Acid Accession #: NM\_016434.1  
Coding sequence: 828..4487

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Seq ID NO: 37 DNA Sequence  
Nucleic Acid Accession #: NM\_015647.2  
Coding sequence: 246..1883

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Seq ID NO: 38 DNA Sequence  
Nucleic Acid Accession #: NM\_003823.2  
Coding sequence: 101..1003

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Seq ID NO: 39 DNA Sequence

Nucleic Acid Accession #: NM\_032945.1

Coding sequence: 435..1337

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Nucleic Acid Accession #: NM\_002423.2  
Coding sequence: 48..851

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Seq ID NO: 42 DNA Sequence  
Nucleic Acid Accession #: NM\_018674  
Coding sequence: 390..2009

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Seq ID NO: 43 DNA Sequence  
Nucleic Acid Accession #: AK091016  
Coding sequence: 201..2291

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AGCAGCAACA GAAGGAGCCG TGCAGACTTC CAGCTCCAA AATGACCCAC AAGGGCGAAG 900  
TGGAGATTCA GCGGGACATG GACAGACAC TGACCTTGGG GGATCTGGTG GGACCCGAGA 960  
TGTTCATGGA CTGACGCCCA CAGGCCCTGC CCATGSCATC AGAGGACACC ACGGGCAGC 1020  
ATGACCAACA CTCTTAGAG CCCAACTGCC ACATCTGCAA GGACTGGGAG CCTTCGAATG 1080  
AGCTGCTAGG TCCTTCGAA GCGGCCAAGA GCTGCGGGGA CAATATCTTC CAGAAAGCCC 1140  
TAAGCAAAAC TCCTTAGCTT GCTCCAGAGA TGCCCAAAAC CAGGGAGTTG TCTCCCAAGC 1200  
AACCAAGGA CAGGGTCCCT CCATCTGGCC TCCATGTGCC TGCTGCACCC ACAAAAGGCC 1260  
TGCCCTGCTT GCCACCTGG GAAGGTGTTT TGGACATGTT CTCCATCAAG CGGTTCGGGG 1320  
CCAGGGCCCT GCTGCTCTCG GGACACAGCT GTGGCTTGT CCAGCTCTG CCCACCGTGA 1380  
TCCGCTCCGC AGGCTGCATC CCCTCCAACA TTGCTGGGA CCTTCTGGCC AGCATCTGCC 1440  
CAGCCAAAGC CAAGGACGTC TGCTGGTCA GACTGTGCC ACATGGGGCC CGGGACACCC 1500  
AGAACTGCCG CTGCTCTAC TCATACCTCA ATGATAGGCA GCGCCACGG CTGGCCTCTG 1560  
TGGAGCACAT GGGGATGGTC CTGCTGCCCC TGCTGCTT CCAGCCCTG CCCACCCAGC 1620  
TGCGCCCTTT GGGGGGCCCA GGTCTGAGG TCACTCACTC AAGTCTGTTG CTGGCTGTGC 1680  
TGCTCCCAA GGAAGGGCTT CCAGACACAG CAGGGTCCAG CCCCTGGTTG GGGAAAGTTT 1740  
AAAGATGGT CTCTTCAAC AGTAAGGTGG AGAAGAGATA CTATCAGCCA GATGACAGGA 1800  
GGCCGATGTT GCCCTGAAG GGCAACCCCTC CCCCAGGAGG TGCTGGCAG CAGAGCCAGG 1860  
GCAGGGGAGC TATAGTCCA AGGGAACTCT CTGCTGGCA GAGGCCCCCC AGAGGCAGGG 1920  
GGAGGCTCTG GCGAGAGCCT GAAACTGSC AGCATCTGCG GCGAGGGCAG TGGCCCCCAG 1980  
AGCCAGGCTT GCGCCAGTCC CAGCATCCCT ATTGAGTAGC ACCAGCTGGT CATGGCTTTG 2040  
GCGTGGCCA GCACTTCCAC AGGGACTCCT TCTCCCAACA AGCCCTGCTC CGGCACCTCG 2100  
AATCCCTGGC GACCATGAGT CACCACTGCC AAGCCTTACT GTGCCCCCAG ACCAAGAGCT 2160  
CCCTCCCCCG CCCTCTGAG CGTTTGTCTA GCGCCCTTGC AGCTCCAGAG CCCCTTGGCC 2220  
CAGCCCGTGA CTCTCTTTG GGGCCTACAG ATGAAGCTGG CTCTGAGTGT CCCTTCCCTA 2280  
GAAAGGCTG ACCCTCTTA CCCACAGAA CAGGGCTTTT GATGCCCTCA CTAGTGTGTA 2340  
AGCCTGTTC AGAGAGAGGT GGGACTGCAA GGAGAGGATG GTCAGCCCTA CCCACCTGCC 2400  
CTGTTGAAC TTCTGTGTTG ACAAATGTTT CTGTTGATT TTTGTTCAAT AAAGAAATTG 2460  
GT 2462

Seq ID NO: 44 DNA Sequence  
Nucleic Acid Accession #: NM\_005291  
Coding sequence: 75..1178

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65  
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75  
80

1 11 21 31 41 51  
CCGACACCCA GGGGGGAGGA TCACCTGCTG CCGGCGAGAC CCCTGTCCCT TCCTCCCGGA 60  
CCAGCAGCTA GAGGATGTCC AAACGGAGTT GGTGGGCTGG ATCCAGAAAG CCCCAAGAG 120  
AGATGCTGAA ACTCTCAGGC TCTGACTCCA GCCAAAGCAT GAATGGCCTT GAAGTGGCTC 180  
CCCCAGGTCT GATCACCACG TTCTCCCTGG CCAAGGAGCA GCAATGTGGC CAGGAGACGC 240  
CACTGGAGAA CATGCTGTTT GCCTCCTTCT ACCTTCTGGA TTTTATCCTG GCTTTAGTTG 300  
GCAATACCTT GGCTCTGTGG CTCTTATCC GAGACCAAA GTCCGGGACC CCGGCCAAGC 360  
TGTTCTGAT GCATCTGGCC GTGGCGGACT TGTGCTGGT GCTGTGCTG CCCACCCGCC 420  
TGGTCTACCA CTCTCTGGG AACCACTGGC CATTTGGGGA AATCGCATGC CGTCTCACCG 480  
GCTTCTCTT CTACCTCAAC ATGTACGCCA GCATCTACTT CCTCACCTGC ATCAGCGCCG 540  
ACCGTTTCTT GGCCATTGTG CACCGGTCAG AGTCCCTCAA GCTCCGAGG CCCCTCTACG 600  
CACACTGGC CTGTGCTTTC CTGTGGGTGG TGGTGGCTGT GGCCATGGCC CCGCTGCTGG 660  
TGAGCCCACA GACGTCGAG ACCAACCACA CGGTGGTCTG CTGCACTGCT TACGGGAGA 720  
AGGCCTCCCA CCATGCCCTG GTGTCCCTGG CAGTGGCCTT CACCTTCCCG TTCTACCA 780  
CGGTCACTG CTACCTGCTG ATCATCGCA GCTGCGGCA GGGCCTGCTG GTGGAGAAGC 840  
GCCTCAAGC CAAGGAGTGG CGCATGATCG CCATAGTGTG GGCCATCTTC CTGGTCTGCT 900  
TCGTGCCCTA CCAAGTCAAC CGCTCCGTCT ACCTGCTGCA CTACCGAGC CATGGGGCTT 960  
CTGTGGCCAC CCAGCGCATC CTGGCCCTGG CAACCGCAT CACCTCTGCT CTCACCAAGC 1020  
TCAAGGGGGC ACTCGACCCC ATCATGTATT TCTTCTGGC TGAGAAAGTT CGCCAAGCCC 1080  
TGTTCACTT GCTCTGTGG AAAAGGCTCA AGGGCCCGCC CCCAGCTTC GAAGGAGAAA 1140  
CCAAGGAGC CTGCTGAGT GCCAAGTCAG AGCTGTGAGC GGGGGGCGCC GTCCAGGCGC 1200  
AGCCAGACT GTTTAGGACT CAGCAGACC AGCAAGAGGC ATCTGCCCTT TCCCAGCCA 1260  
CTTCCCGAGC AAGCAACCTG AAATCTCAGC AGATGCCAC CATTTCTCTA GATCGCTAG 1320  
TCTCAACCCA TAAAAAGGAA GAACGTACAA AGGGGATCCA TCGGCCACCC CTCTGCAGGG 1380

5 GCTGTGATG GCTACAATGG CTCTAGACA CTCAACGACT TCATCTGTGG CAGGGAGAGA 1440  
GGAGGCCGGA AGAACACACC CTGAACAATG GAGGCTTTTC TTCCCGCTA GGCTCCAGC 1500  
CTCCTTCCCG CTACAGAATC GCTCATCGGC GAGGCTCAGC AGAAAGACCC TGAAGGCAGG 1560  
CTGCAATGA CCCAGAGAG GGACCTGGGA GTCTGTGTGG GGAAGGGGAG GGAGTCTCAA 1620  
TACTCTTTG CAGCCCAAGG TACTCTGAGT CCGCTCTGTA GTGCTCTGC CAGACACACA 1680  
CTGCTGTAGT TGAAGAGACA CAGGCCACAC ATTTACGGGT GGTTCGCCAGC GGACGTGAGC 1740  
ACTCAGGCC TCGGGGAGCT CAGCACAGCT CTGATTCTGT GATCTCTCCT GCTGTAACCC 1800  
CACGCACAG CCTGCAACCC CCAGAGCTCT TTGACAGGCT CCCAGGCTC CCAGTCTTGG 1860  
ACAAGCATGT CAGTCAACGG GAGCTCAGCT GAGGCCAGGG CTGGGCTGTG CACTGCTCTC 1920  
10 CCATGACCC AGACCCACTT CCTCCAGAGA GGCTCTCTC CGCTGAGCT ATTTCCCTTG 1980  
CTAGTGTGCA GATATTTCCC TAACATGTCC TTTTGTGTAT TTGTTGTAC GGACATATAA 2040  
TATAACTGTA GCTTTAAGAC TAAAAAATAA 2070

15 Seq ID NO: 45 DNA Sequence  
Nucleic Acid Accession #: NM\_018643  
Coding sequence: 48..752

1 11 21 31 41 51  
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20 CTACTACTAC TAAATTGCGG GCCGGTGGAC GCTGCTGCAC AGGAAGGATG AGGAAGACCA 60  
GGCTCTGGGG GCTGCTGTGG ATGCTCTTTG TCTCAGAACT CCGAGCTGCA ACTAAATTAA 120  
CTAGAGAAA GTATGAACCTG AAAGAGGGGC AGACCTGGGA TGTGAAATGT GACTACACGC 180  
TAGAGAAGTT TCGCAGCAGC CAGAAAGCTT GGCAGATAAT AAGGGAAGGA GAGATGCCCA 240  
AGACCTGGGC ATGCACAGAG AGCCCTTCAA AGAATCCCA TCCAGTCCAA TGGGGAGGA 300  
TCATACTAGA AGACTACCAT GATCATGGTT TACTGGCGGT CCGAATGGTC AACCTTCAAG 360  
25 TGGAAAGTTC TGGACTGTAT CAGTGTGTGA TCTACAGCC TCCCAAGGAG CCTCACATGC 420  
TGTTCGATCG CATCCGCTTG GTGGTGACCA AGGGTTTTTC AGGAGCCCTC GGCTCCAAATG 480  
AGAATTTTAC CCAGAAATGT TATAAGATT CTCTACCCAC CACTAAGGCC TTGTGCCAC 540  
TCTATACCAAG CCCAGAACT GTGACCCCAAG CTCACCCCAA GTCACTGCC GATGTCTCCA 600  
CTCCTGACTC TGAATCAAC CTACAAATG TGACAGATAT CATCAGGGTT CCGGTGTTC 660  
30 ACATTGTCAT TCTCTGGCT GGTGGATTCC TGAGTAAGAG CTTGGTCTTC TCTGTCTGT 720  
TTGCTGTAC GCTGAGGTCA TTGTGACCT AGGCCCAAG ACCCAGAGA ATGTCTCTG 780  
ACTTCAGCC ACATCCATCT GGCAGTTGTG CCAAGGAGG AGGGAGGAG TAAAGGCAG 840  
GGAGTTAATA ACATGAATTA AATCTGTAAT CACAGCTAT TTCT 884

35 Seq ID NO: 46 DNA Sequence  
Nucleic Acid Accession #: NM\_003467  
Coding sequence: 1..1059

1 11 21 31 41 51  
| | | | |  
40 ATGAGGGGGA TCAGTATATA CACTTCAGAT AACTACACCG AGGAAATGGG CTCAGGGGAT 60  
TATGACTCCA TGAAGGAACC CTGTTTCGT GAAGAAAATG CTAATTTCAA TAAAATCTTC 120  
CTGCCACCA TCTACTCCAT CATCTTCTTA ACTGGCATTG TGGCAATGG ATTGCTATC 180  
CTGGTCTATG GTTACCAGAA GAAACTGAGA AGCATGACGG ACAAGTACAG CCGTGCACCTG 240  
45 TCAGTGGCCG ACCTCTCTTT TGTATCACG CTTCCTTCT GGGCAGTTGA TGGCGTGGCA 300  
AATGTGACT TTGGGAATT CCTATGCAAG GCAGTCCATG TCATCTACAC AGTCAACCTC 360  
TACAGCAGTG TCCTCATCTT GGCCTTCATC AGTCTGGACC GCTACCTGGC CATGCTCCAC 420  
GCCACCAACA GTACAGAGCC AAGGAAGCTG TTGGCTGAAA AGGTGGTCTA TGTTCGGTTC 480  
TGGATCCCTG CCCTCTGCTG GACTATTCCC GACTTCATCT TTGCAACGT CAGTGAAGCA 540  
GATGACAGAT ATATCTGTGA CCGCTTCTAC CCAATGACT TGTGGTGGT TGTGTCCAG 600  
50 TTTGACACA TCATGGTTGG CCTATCCTG CTTGGTATTG TCATCTGTG CTGCTATTGC 660  
ATTATCATCT CCAAGCTGTC ACATCCCAAG GGCACACAGA AGCCCAAGGC CCTCAAGACC 720  
ACAGTCTCC TCATCTCTGC TTCTTCTGCC TGTGGCTGCT CTTACTACAT TGGGATCAGC 780  
ATGACTCTCT TCATCTCTCT GGAATTCATC AAGCAAGGGT GTGAGTTTGA GAACACTGTG 840  
CACAGTGGGA TTTCATCAC CGAGGCCCTA GCTTCTCTCC ACTGTTGTCT GAACCCCATC 900  
55 CTATATGCTT TCCTCTGAGC CAAATTTAAA ACCTCTGCCC AGCACGCACT CACCTCTGTG 960  
AGCAGGGGT CCAGCTCAA GATCCTCTCC AAAGGAAAGC GAGGTGGACA TTCATCTGTT 1020  
TCCACTGAGT CTGAGTCTTC AAGTTTTCAC TCCAGCTAA 1059

60 Seq ID NO: 47 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

1 11 21 31 41 51  
| | | | |  
65 GTGTGTAGTC GGTATGAGA ACGATTGCAA GCAAAAGCAG CTGAGGGACG CTGTCCAAGG 60  
AGTAGGCTCA GTAGCAGGAA CTGCAAAATC TTGAGAAGGG AAAAGTTTCA CTTTGTGCTG 120  
GAAAGTGTT TAGCATGCTG GAGCTGGTTT TCTGCTTGGT AGCCCTACAA CTTTGGCCCA 180  
ACTACTTGGC CTCTGGGACT CAGATTCTCT CTCTTTAAAT TGGTGCTAAT AATAGCACCC 240  
ACCTCTGTGT AGGAGGATGC TGTGAGGACA AAATGAGATC ATCCACATAA GCGGTGAACC 300  
CTGTTCTCTG TAAGCTCTGT GAAAGAGTCT TATGGATTAT ACTCAACCTA CACTCCAGTT 360  
70 AAAGGAACAT CTACACAGAG ACGAAATGAA TAACATGAAG TGAAGTCTTC ATCTCCATTG 420  
CCAACAGTCC CCATTCTACT TGCAGAAAGG TTCTTTACAC TGAAATACAG TTTATTTTCC 480  
CCTGTGTCAA AGAACAGTCT TTCTCCAAA ACTGAAGCTG GAAATATCT GAAATATCAG 540  
GTCTCTCGGA AAAGGAGAGT GAAGCCCTCT TTGTAATTTT TGCATTAGCC TGCTCTCCTG 600  
GCAAGCAGGA AACCTCATCA GAGAAGTCTG CCAAGGAAAG TCTTTAAATG GAAATGTGTC 660  
75 AAAGCAGGAG CAAATGCATT AAAAAGTTGC TGACGGGCAT GAAATGCTTT GATGTGAAGA 720  
CGGAAACTC CAAGCAGGAA GGATTTTAAC ATTTTGAATC TGAATTGACT TGTGTTTCT 780  
CAGCACAGTT ATTCATGAGG CTAATAATTA TGCAGAAATG GTACTTTCAG ACCACAGCTG 840  
CAGAGGGGAT GGTGTGTAAT TTCAATGAAA ATCCATTGTA ATCTTGAGGT TCAGATCTTA 900  
AAAAAGCAAA GGACATGAGA GAAGTAATAT TGTGTCTTGA AATTTCAATT CTATATCTTA 960  
80 AAAGAACTC CTATTTTAA GAGAAATGTT GAATCTTTGC AACGTGGTAG ACGCTCCAC 1020  
AAACTTTCT CCTGAAATAG GAGATAAATG TTGGAAAGAG GCAATGTATT GAGTATGCTG 1080  
ATAGAGGTG AGTTCAGAGA CAGGCAAGCA TACATAAGAG TCAGGATGTT TTTCAATATT 1140  
ATCTTTACAA ATGAGTTTCT TACAGTGTCT AATGACAAAC CAATTTCAAT CAAAGCTTGC 1200  
TTCAATAGGC AATGGTTTGA TGCCAAATAT TTAGCTATT ACTTTGACCA CCGATATGAT 1260  
TAAAAAGAAG AAAAATTAAG AATACTCAAG CAGAACCTCC AACTTATGATA GCATTTCCA 1320

CAAAAAGTAA TGGAGGGATA GACTGAAGTT AAATGGGATC AGGTATGTGA TGAGATCTCA 1380  
GAAGTGTGTT CACAATAATG CAGATACTCA TTTTAAACAG AGTCATAAGG ATTGGAACTA 1440  
ATAAAAATAA TAGAATAAAA TACGATCAAA GAATGTGTCC TCGTGGTAT CTGGGTTTTG 1500  
AATTCTGGCT CCACAGAAGT TGTGAGATAT ATGACATTAA AC 1542

Seq ID NO: 48 DNA Sequence  
Nucleic Acid Accession #: E08 sequence  
Coding sequence: 52..1131

10 1 11 21 31 41 51  
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ATGCATCCTC AAGTGGTCAT CTTAAGCCTC ATCTACATC TGGCAGATTC TGTAGCTGGT 60  
TCTGTAAAGG TTGGTGGAGA GGCAGGTCCA TCTGTACAC TACCTGCCA CTACAGTGGG 120  
GCTGTACAT CAATGTGCTG GAATAGAGGC TCATGTTCTC TATTCAATG CCAGAAATGGC 180  
ATTGTCTGGA CCAATGGAAC CCACGTCAAC TATCGGAAGG ACACACGCTA TAAGCTATTG 240  
15 GGGACCTTT CAAGAAGGGA TGTCTCTTTG ACCATAGAAA ATACAGTGT GTCTGACAGT 300  
GGGTATATT GTTGCCGTGT TGAGCAGCGT GGGTGGTTCA ATGACATGAA AATCACCGTA 360  
TCATTGGAGA TTGTGCCACC CAAGTCAAG ACTACTCCAA TTGTCAACAC TGTTCACACC 420  
GTCAAGACTG TTGGAACGAG CACCACTGTT CCAACGACAA CGACTGTTCC AACGACAACT 480  
GTTCCACAG CAATGAGCAT TCCAACGACA ACGACTGTTT CGAAGCAAT GACTGTTTCA 540  
20 ACGACAGCA GCGTTCACAC GACACGAGC ATTCCACAA CAACAAGTGT TCCAGTGACA 600  
ACAAAGGTCT CTACCTTTGT TCTCCAAAT CCTTGGCCA GGCAGAACCA TGAACCAAGT 660  
GCCACTTCAC CATCTTCACC TCAGCCAGCA GAAACCCACC CTAGACACT GCAGGGAGCA 720  
ATAAGGAGAG AACCCACAG CTCACCATG TACTCTTACA CAACAGATG GAATGACACC 780  
GTGACAGAGT CTTGAGATGG CCTTTGGAAT AACAAATCAA CTCAACTGTT CCTAGAACAT 840  
25 AGTCTACTGA CGGCCAATAC CACTAAAGGA ATCTATGCTG GAGTCTGTAT TTCTGTCTTG 900  
GTGCTTCTTG CTCTTTTGGG TGTCTCATTT GCCAAAAGT ATTTCTTCAA AAAGGAGGTT 960  
CAACAATCAA GTGTTTCATT TAGCAGCCTT CAAATTAAG CTTTGCAAAA TGCAGTTGAA 1020  
AAGGAAGTCC AAGCAGAGA CAATATCTAC ATTGAGAATA GTCTTTATGC CACGGACTAA 1080

Seq ID NO: 49 DNA Sequence  
Nucleic Acid Accession #: NM\_004932.2  
Coding sequence: 327..2699

35 1 11 21 31 41 51  
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ACTTCATCCA CTGCAAAATC AGTGTGTGCC CACAAGAGCC AGCTCTCCCG AGCCCGTAAC 60  
CTTCCGATCC CAAGAGCTGC AGTTTCAGCC GGCAGAGCAA GAACGGCAGA GCCCGCGACC 120  
GGCGCGGGG CGCGGGCGGA GGCAGGAGCA GCCTGGGCGG GTCGAGGGT CTCGCGGGC 180  
GCAGGAAGGC GAGCAGAGAT ATCTCTGAG AGCCAGCAAA AGAATATTAA GGAAGGAAGG 240  
AGGAATGAG CTGGAACGCG TGCAAGTAAA AAGGCACTTC CAAGAGTGGG GCACTCACTA 300  
40 GGCACAGACT CGACGGTGGC ATCAGCATGA GAATTAACCG CTACTCTTG CTGCTCTTTT 360  
GGGTGGGCCA GCCCTACCCA ACTCTCTCAA CTCCACTATC AAAGAGGACT AGTGGTTTCC 420  
CAGCAAGAG AAAGGCCCTG GAGCTCTCTG GAAACAGCAA AAATGAGCTG AACCGTTCAA 480  
AAAGGAGCTG GATGTGGAAT CAGTCTCTTC TCTGGAGGA ATACACAGGA TCCGATTATC 540  
AGTATGTGG CRAAGTACAT TCAGACAGG ATAGAGGAGA TGGATCACT AAATATATCC 600  
45 TTTCAAGAGA TGGAGCAGGA GATCTCTTCA TTATTAATGA AAACACAGGC GACATACAGG 660  
CCACCAAGAG GCTGGACAGG GAAGAAAAC CGGTTTACAT CCTTCAGCT CAAGCTATAA 720  
ACAGAGGAGC AGGGAGACCC GTGGAGCCCG AGTCTGAAT CATCATCAAG ATCCATGACA 780  
TCAATGACAA TGAACCAATA TTCACCAAG AGGTTTACAC AGCCACTGTC CCTGAAATGT 840  
CTGATGTGG TACATTGTT GTCCAAATCA CTGCGAGGA TGCAGATGAT CCAACATATG 900  
50 GGAACAGTGC TAAAGTGTG TACAGTATTC TACAGGACA GCCCTATTTT TCAGTTGAAT 960  
CAGAAACAGG TATTATCAAG ACAGCTTTCG TCAACATGGA TCGAGAAAAC AGGGAGCAGT 1020  
ACCAAGTGTG GATTCAAGCC AAGGATATGG GCGGCCAGAT GGGAGGATTA TCTGGGACCA 1080  
CCCGAGTAA CATCACACTG ACTGATGTCA ACGACAACCC TCCCGGATTG CCCCAGATTA 1140  
CATACCACTG TAAACTCTCT GAATCTTCTC CACCGGGGAC ACCAATTTGC AGAATCAAAG 1200  
55 CACAGGAGCC TGAATGTGGA GAAAATGCTG AAATGAGTA CAGCATCACA GACGGTGGAG 1260  
GGCTGGATAT GTTGTATGTC ATCACCGACC ACGAAACCCA GGAAGGGATT ATAACTGTCA 1320  
AAAAGCTCTT GGAATTTGAA AAGAAGAAAG TGTATACCTT TAAAGTGGAA GCCTCCAATC 1380  
CTTATGTGGA GCCACGATTT CTCTACTTGG GGCCTTTCAA AGATTGAGC ACGGTTAGAA 1440  
TTGTGTTGGA GGAATGTAGAT GAGCCACTG TCTTCAGCAA ACTGGCTAC ATCTTACAAA 1500  
60 TAAGAGAAGA TGCTCAGATA AACCCACAA TAGCTCCGT CACAGCCCAA GATCCAGATG 1560  
CTGCCAGGAA TCTGTCAAG TACTCTGTAG ATCGACACAC AGATATGAGC AGAATATTCA 1620  
ACATTGATTC TGGAAATGGT TCGATTTTAA CATCGAAACT TCTTGACCGA GAAACACTGC 1680  
TATGGCAGAA CATTACAGTG ATAGCAACAG AGATCAATAA TCCAAAGCAA AGTAGTCGAG 1740  
TACCTCTATA TATTAAAGTT CTAGATGTCA ATGACAACGC CCCAGAAATT GCTGAGTTCT 1800  
65 ATGAAACTTT TGTCTGTGAA AAAGCAAAGG CAGATCAGTT GATTGAGACC CTGCAATGCTG 1860  
TTGACAAGGA TGACCTTTAT AGTGGACACC AATTTTGTG TTCTTGGCC CCTGAAGCAG 1920  
CCAGTGCTC AAACCTTACC ATTCAAGACA ACAAGACAA CACGGGGGGA ATCTTAACTC 1980  
GGAATAATGG CTATAATAGA CACGAGATGA GCACCTATCT CTGCTGTG GTCAATTCAG 2040  
70 ACAACGACTA CCCAGTTCAA AGCAGCACTG GCACAGTGC TGTCCGGGTG TGTGATGTG 2100  
ACCACCAAGG GAACATGCAA TCTGCCATG CGAGGGCGCT CATCCACCCC ACGGAGTGA 2160  
GCACGGGGG TCTGGTTGCC ATCTTCTGT GCATCTGTAT CTAATAGTG ACAAGTGTG 2220  
TGTTTGCAGC TGTGAGCGG CAGCGAAAAA AAGAGCCTTT GATCATTTCC AAAGAGGACA 2280  
TCAAGATATA CATTGTCACT TACAACGAGC AAGGTGGTGG AGAGGAGGAC ACCAGGCTT 2340  
TTGATATCGG CACCTGAGG AATCTGAGG CCAATAGAGGA CAACAAATTA CGAAGGGACA 2400  
75 TTGTGCGGGA AGCCCTTTTC CTACCCGAC GGAATCCAAC AGCTCGGAC AACACCGATG 2460  
TCAGAGATTT CATTAACCAA AGGTTAAAGG AAAATGACAC GGACCCCATC GCCCGCCAT 2520  
ACGACTCTTT GGCACCTTAC GCCTATGAAG GCACTGGCTC CGTGGCGGAT TCCCTGAGCT 2580  
CGCTGGAGTC AGTGACCAAG GATGAGATC AAGACTATGA TTACTTTAGT GACTGGGGAC 2640  
CTCGATTCAA AAAGCTTGCA GATATGTATG GAGGAGTGGG CAGTGACAAA GACTCTAAT 2700  
80 CTGTTGCCCT TTTCATTTTC CAATACGACA CTGAAATATG TGAAGTGGCT ATTTCTTTAT 2760  
ATTTATCCAC TACTCCGTGA AGGCTTCTCT GTTCTACCCG TTCCAAAGC CAATGGCTGC 2820  
AGTCCGTGTG GATCCAAATG TAGAGACTTT TTTCTAGTAC ACTTTTATGA GCTTCCAAGG 2880  
GGCAATTTT TATTTTATAG TGATCCAGT TAACCAAGTC AGCCCAACAG GCAGGTGCCG 2940  
GAGGGGAGGA CAGGGAACAG TATTTCCACT TGTCTCAGG GCAGGGTGGC CGCTTCCGCT 3000

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TGAGGGCATA TCGGCTCACA AAGAGATAAA CTACATAGGG GTGTTTATTT GTGTCACAAA 3180
GAATTTAAAA TAACACTTGC CCATGCTATT TGTCTTCAA GAACCTTCTC TGCCATCAAC 3240
TACTATTCAA AACCTCAAAT CCACCCATAT GTTAAAAATC TCATTACTCT TAAGGAATAG 3300
AAGCAAAATTA AACGGTAACA TCCAAAAGCA ACCACAAACC TAGTAGAGCT TCATTCTCTC 3360
CACTAACTCA TAGTTTGTTA TATCTAGAC TAGACATGGC AAGTTTGCC TTTGTACCAT 3420
ATAAAGGGGG AGGGAATAG CTAATAATGT TAACCAAGGA AATATATTTT ACCATACATT 3480
TAAAGTTTGG GCCACCACAT GTATCACGGG TCACTTGAAA TTCTTTCAGC TATCAGTAGG 3540
CTAATGTCAA AATTGTTTAA AAATTCTTGA AAGAATTTTC CTGAGACAAA TTTTAACTTC 3600
TTGTCTATAG TTGTCAGTAT TATTCTACTA TACTGTACAT GAAAGTAGCA GTGTGAAGTA 3660
CAATAATTCA TATTCTCAT ATCCTTCTTA CACGACTAAG TTGAATTAGT AAGTTTAGAT 3720
TAAATAAAC TTAATCTCA CTCTAGGAGT TCAGTGGAGA GGTTAGAGCC AGCCACACTT 3780
GAACCTAATA CCCTGCCCTT GACATCTGGA AACCTCTACA TATTATATA ACGTGATACA 3840
TTTGGATAAA CAACATTGAG ATTATGATGA AAACCTACAT ATTCCATGTT TGGAAAGCCC 3900
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CTGCGCATCC TTGACTTTGA ACTAATGATA AAGTAATGAT CTCAACTAT GACAGAAAAG 4080
TAATGTAAAA TCCATCCAA CTATTATTTC TCTAATTATG CAATTAGCCT CATAGTTATT 4140
ATCCAGAGGA CCCAATCGAA CTGAACTAAT CCTCTGGCA GATTCAAATC GTTTATTCTA 4200
CACGCTGTTC TAATGGCACT TATCATTAGA ATCTTACCTT GTGCAGTCAT CAGAAATTCC 4260
AGCGTACTAT AATGAAAACA TCCCTGTTTT GAAAACCTAA AAGCAGGCT CTGTATATAT 4320
ATATACTTAA GAATATGCTG ACTTCACTTA TTAGTCTTAG GGATTTATTT TCAATTAATA 4380
TTAATTTTCT ACAATAATT TTAGTGTCTT TTCCATTGG GGATATTGTC ATATCAGCAC 4440
ATATTTCTG TTTGGAACA CACTGTTGTT TAGTTAAGTT TTAATAGGT GTATTACCCA 4500
AGAAGTAAAG ATGAAACGT T 4521
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Seq ID NO: 50 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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1 11 21 31 41 51
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TTTTTTTTT TTTTGA AAAACCAAGT TATTAAGTAA TATCATATAA ATAACCTGTT 60
ACAAAAATTC ATTGCAAAA GGCATATTTA CTCTTTTGGA GAAATCACTT TTTAAATTCG 120
ATTCTTTTCA AATTATTAAG TCTAAGAAAA CAAAACCAAA TAAAGAAGC CATTTCAAGG 180
AGTGGCTATT TGCCATTGGA CTGCAACAAA AGGCCCGGCC ACACGTAGCT AAAAGGTAAT 240
ACTCTGACCC CCATTCTCTT AACACAGAAA ACTTCTCAG GTAAACTGTG GGGTTATGAG 300
AATCCCCCTA ACTAGAAATG TTGATGGGAA CTGAGCATTG CTTCCTTCA TCAGGTGTTT 360
TTGTTGCCAA AGACATGAAC GATACGTAGG AAAACGACAA GAGTGAGCAT TCCCGCCAGT 420
AAATCTTCAA GGGTGGCATC OGTTTCAATT TATACTTGA AGTATTTTAA ATTAATAACA 480
ATCAATACCA AAAAGCTTTT ATTTTGTGGG TTTAAAAGTC ACAANTCACA GTGGGAGAA 540
GCCAAATTGC TTTAGCTTGG AACTACTGAA GACGCACATA GCATTATTA TAAGGCCTAC 600
TCTTAGCGAG TTCACTCTCA AAGCAATGAA AATAATCTCA AACCAACAT TACAGTGGGT 660
TTGAAGTAAG CCTAGCTTTC TTCCGAGCAG GTCAGTTTAA CATTGTCTAC ACAGCAATCC 720
CCAGAAATGC CTGGTAATTC TATACATTG ATTCTTAAAT AAACACTAAA CTAATAGATC 780
ATAGAAAATC AAAAGCTTAG AGAAGTGCC TCCAGACATA TTTACATAAA TAACGTAGCC 840
TCACAAGAAA GACCAAGATC TCATTAGCGT GGAATGCTTT TTCCACAAG CTGGGTCCAT 900
GCCTCATTTG TCAGATTAAAC CCCATTGAG GAGAAATTTG AGTTTGTGTT TCATGGGTTT 960
TTGAAAAAAA AAAAAAATAA AAAATTAAAG AACTTGTAAA AGCTCTTTTG AATTAATCT 1020
AATAACCCAG TGCTCTCTCG GCTAAGTGCC TCAGTCTGTT CTGAAATACA CGGGTAAGA 1080
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Seq ID NO: 51 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: 640..2313

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Seq ID NO: 52 DNA Sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 641..2299

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10 Seq ID NO: 53 DNA Sequence  
 Nucleic Acid Accession #: Eos sequence  
 Coding sequence: 400..1959

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55 Seq ID NO: 54 DNA Sequence  
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Nucleic Acid Accession #: NM\_001218  
Coding sequence: 1..1080

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CCTCTGATC ACAGACACTG CACAGACCTT AGGGAATGGC AGGTTCAAGT TCCACTTCTT 1860  
GCTGGGCTAT AGAAGGGAGA GAGAGCTAGA GGGACAAAGA GAATGAGAAG ACATGGATGA 1920  
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Seq ID NO: 56 DNA Sequence  
Nucleic Acid Accession #: BC000278  
Coding sequence: 113..1144

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Seq ID NO: 57 DNA Sequence  
Nucleic Acid Accession #: NM\_006632.1  
Coding sequence: 377..1582

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Seq ID NO: 58 DNA Sequence  
Nucleic Acid Accession #: NM\_003058.1  
Coding sequence: 145..1812

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Seq ID NO: 59 DNA Sequence  
Nucleic Acid Accession #: Eos sequence  
Coding sequence: 227..2311

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Seq ID NO: 60 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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Seq ID NO: 61 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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AATCAGACTT GCGGATATCC AGTTAACTAT CAATACCTTT AAAAAATGT AACAGCAGT 180  
CCATCTGAAT AATTATCCA AATGTCAAGG CTTTTAAAG TGCTTAACTT TAAAGTCTCT 240  
TTGCAGTTGT TCAGACCTAG ATTCTCAGTT CAGTTAGCAC AGAGAGAGAC AAGGAAAAAA 300  
TGAGGAACAC TTTTCTCAGC CATAAATATT CACTGGTTTT TGAATACTA TTGATTCTCT 360  
GGATAAGAAA ATAGTCAAC TTTATAGCTT TTTGTCTGGA AATTGATTTG CCGCCACAGA 420  
CAGTGGCTTG GTGCTATAA TCCAGCCTA CATGGGAGG TGAGGTGGGA GATCGCTTGA 480  
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Seq ID NO: 62 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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1 11 21 31 41 51  
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TACTATCAAT AATGTTTTCA TGTAAAGCAG CCATCACTTA AAGGAATACT TTTAAACAG 180  
GTTGTACAAT AAAACAGGTT GGACCAATAT AAAAGAAATA TAAATAAAGG TGGTTTATTT 240  
AAATGTAAT ACACAGATAC TTCCATTAAA TCTAAACAAA CTTTAAAAAG AGGAGCAAAAT 300  
AATGAGTAAT GCCATAGAAC ATTAGAAGAA CACAGTTAAC GAATGGAAAC TTGTAAACAG 360  
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TAGAGCATAT TGAATTTTGA ATAATTATTT GAAGTGACAT GTGGTGGGAC ATAAATCAAG 480  
ACTCAGTAAA TTTGAAAAA TTCAATATCA TAAAGAATAT ATGATCCAGC CTTAGTAGAA 540

GTAAGGGAAA TTTAAAAAT GTAATAAAA TATCTTTAAT TTTGGAAATT AAGAAAAATAC 600  
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5 Seq ID NO: 63 DNA Sequence  
 Nucleic Acid Accession #: AK025967

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10	ACAACAGGAA	CACATATAGC	TGGAATGCAG	ATGGGATCTG	TGCTACTTAC	GCTAGCCATG	60
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	TGTTTTGGAA	AAGAGAACTC	AAGGTCTGGC	AGGGAGAAAG	GAGCAAGGTC	CTCTTCTCCC	180
	TGAAGGCTGT	CACAGTTCTC	GTGACAGAG	AGAGGGCACT	GCAGCACCCA	GGCGCTGACT	240
	GCCTTTTGTG	AGTCTCATTT	GCAGGCCCCC	AGCTGGAGAA	CCAGGAGGGA	AGAGGAAAAA	300
	AGTTTTTTCC	TCCTCTACAC	TCCCCATGCA	TGACTAAAGA	GTAGGAGGAG	TCAGCAAGGC	360
15	AGACATATAT	AGTACCCAGG	AGGTGGACAA	ACAACCTGCT	TGGTGGAAAC	TCTGTCTTTT	420
	CTGGACTTAT	CCTGGTGCCA	CTGAGACTGT	CGAGATTTAG	ATCTACAATC	CACCTGGAAT	480
	TGATTTTTGT	ATATGGAGTG	AGGTCCACAC	CTTACAGGGA	AAGCATCACC	CGAAAGTGAG	540
	AATGCCATGA	GSCAGGAATC	ATGGAGGCTT	CCTTAACCGT	CTGTCTGCAA	CAGCAGGTGC	600
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20	CACACTTTAA	AGATGAAGAA	ACTGGTATTG	AGAAAAATAC	ACAGCTTATC	CAAGGTTGCA	720
	CTCGTGGTTG	GTAGCTGGAG	TGAATTTAGA	ACCCACATCT	GATGACTACA	CCATATTGCT	780
	CCCAGTTTTT	CTGTCTGTTT	CACATGTAAA	AGTCTGACTC	TTCACTTCTC	CTTTGAGTAT	840
	ATAGACTTTT	AACATTTTTG	TATGTCAAGA	TGGACTTTTC	CTCATACCCA	GCCCCGTGCT	900
	TTTCTCTCTC	CTTCATACCT	TGCAGATCTT	TTAACAGAAAT	TTAAAAAGGAG	TTTTTTGTTT	960
25	TGTTTTGTATG	TATCTAATAA	AAGTCAAGGG	AGGGAGAGGG	CCAGTATAAG	CAAGAGTACA	1020
	GTTCCTTAGT	TTGTAGATGC	GGTAGTCTGA	GGAATCAGAA	ACACACAAAG	GTTTGGAGAA	1080
	CTGGTACATG	CTCCAGGTGG	GGAAGCCAGG	ACTCTTGGTA	GGATCTTGAG	GACACAGGCAA	1140
	AGGACAAATA	GAGAGCCAGG	GGATCCTAGA	GGTGGAAATCA	AGGAAGAGAA	ACTAGAGAGA	1200
	GAAAAAGGAA	CTGGCTATCC	ATCCATGATG	GATCCTGTGT	GGACTGATGG	GTGGCTTGGC	1260
30	ATCATCTCTT	AGTAGACTTC	ATGTGGTTGA	ATAATTGGCC	AATGGAAAGGA	ATTTCTTTTT	1320
	TGGTAACAGA	CTCTGTGTGT	ACAGTTATGG	GTCTTAATTT	ATAATAAAGG	GTTACATTGA	1380
	AAATTCAGAA	AAAAAAA					1398

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 Nucleic Acid Accession #: Eos sequence

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	GCCTTCTCGG	CACCTTTGGTC	TTGAACTTCC	CAGCCTCTAA	AACCTGTGAGA	AATAAGTTTC	240
	TGTTGTTCAA	GCCACCCAGT	CTATGGTATT	CTGTATGGCA	GCCAGAAATTA	AGACACCACT	300
	GAAGCAAGAT	AATCAGTAAC	TGGATACTTA	ACTGTGTGGT	ATAAAACATA	GGGGCTTAG	360
	TAGAGAAGAA	AATTGGACTT	TGTTGGGAC	ATCCTTACTA	CTTCTGCTCA	TGTATCATGC	420
45	TTTAGCTTGT	TTCTGTCTTT	GGAGGAGGCT	GCATATTTTT	AAAATACCCC	CAAAAGTACA	480
	AAGACTAATG	TTATAGCCCC	TGTGTTCTCA	TTATCCAGGC	TTAATAAATG	TTGGCCATT	540
	TCACCTTTTG	TTTATATAT	AAGTTTCTAC	AAAATGACAA	CACCTTAGAT	AAAGCTGAAG	600
	TTCAATTTTC	ATTCTGCATC	CCTTCCCCCA	AGGGCTTCTT	TTGCTCAATA	TGGGACTCAT	660
	GAGAGTCATC	GGTGTGTGT	GAGGAGGCTG	TTTGTGTATT	TTCTGGACCA	AATAATGTTT	720
50	CACCGTGTGA	CTGGACATAC	CTTAGTCTAT	CCATTCTACC	ACTGATGAGC	ATGTAAGCTG	780
	TTACTATTTT	TAACATTTAC	AAATATCTTT	GCTAACACAT	TTTTGTGCAT	GTCTTTTGGT	840
	GACCAATATG	ACTCATTTCT	CTCAGGTATG	TATCTCAGAG	TGAAACTGTT	TTATCACAGT	900
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55	GATGTAAAT	TATTTCTTTA	TGGCTGGCT	CAGTGGCTCA	TGCTGTAAAT	CCCAGCATTT	1020
	TGGGAGGCCA	AGGTGGGAGG	ATTGCTTGAG	GCCAGGAGTT	CAAGACCAGC	CTGGGCAACA	1080
	TACTGAGACC	CTCATCTCTA	CAAAAAA	AAATTTGTTT	AATTAGCTGA	GCTTGGTGGT	1140
	ATGCACCTAT	AGTCTTAGCT	ACTCAGGAGG	CTGAGGCGAG	AGGATCGGTT	GAGCCAGGGA	1200
	ATTCAAGAT	CGAGTAAGCT	ATGATCATGC	CACGTGATTA	CAGCCTGGGT	GATAGGGTGA	1260
	GACCCCTGCT	CTAAAAAGAT	ACATCTATTA	AAAAATAAT	TATTTTATTT	TATTTTATTT	1320
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	ATATCTCCCA	GTGCTATCCC	TCCCCCTCC	CCGACCCCA	CAACAGTCCC	CAGAGTGTGA	1500
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	GAGAAAAATA	CACAGCTTAT	CCAAGGTTGC	ACTGCTGGTT	GGTAGCTGAG	ATGAATTTAG	2040
	AACCCACATC	TGATGACTAC	ACCATATTGC	TCCCAGTTTT	CCTGTCTGTT	CCACATGTAA	2100
	AAGTCTGACT	CTTCACTTCT	CCTTTGAGTA	TATAGACTTT	TAACATTTTT	GTATGTCAAG	2160
	ATGGACTTTT	CCTCATACCC	AGCCCCCTGC	TTTTCTCTCT	CCTTCATACC	TTGCAGGATC	2220
75	TTTAAAGGAA	TTTAAAGGAA	GTTTTTTGT	GTATTTTGT	GTATCTAATA	AAAGTCAAGG	2280
	GAGGGAGAGG	GCCAGTATAA	GCAAGAGTAC	AGTTTCTAGT	TTTGTAGATG	CGGTAGTCTG	2340
	AGGAATCAGA	AACACACAAA	GGTTTGGAGA	ACTGGTACAT	GCTCCAGGTT	GGGAAGCCAG	2400
	GACTCTTGGT	AGGATCTTGA	GGACAGGCA	AAGGACAATA	AGAGAGCGAG	GGGATCCTAG	2460
	AGGTGCAATC	AAGGAAGAGA	AACTAGAGAG	AGAAAAAGGA	ACTGGTATAT	CATCATGATG	2520
80	GGATCCTGTG	TGGACTGATG	GGTGGCTTGG	CATCATCTTT	TAGTAGACTT	CATGTGGTTG	2580
	AATAATTGGC	CAATGGAAGG	AAATTTCTTT	TTGGTAACAG	ACTCTGTGTG	TACAGTTATG	2640
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Seq ID NO: 66 DNA Sequence  
Nucleic Acid Accession #: NM\_022073.1  
Coding sequence: 327..1046

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5 TATATAGTCT TCACAGATAG AAGTTTACTT TTCTCTCTTC TGGTTTGGGA AAATTTCAG 2460  
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75 CATTCACACC TCAACGGCCA GTACTTCCG TCCATCCAC AGCAGCGGCA GAAGCTTAAG 1320  
AAGGGAATCT TCTGGAAGAC CTGGCGGGGC CGCTACTACC CGCTGACGCG CACCAACATG 1380  
TTGATCCAGC CCAATGGCAG AGAGGAGGCT TCTTGGGTC CTGGCTGGGC CTGGTCCAG 1440  
GCCACGAAAG GACCGTGAAT CTTGGCTCTG CCGGAGGATG TGGCCAAGAC CACGACTGGA 1500  
80 GAAGCCCCCT TTCTGAGTGC AGGGGGGCTG CATCGTTTC CTCTGAGAT CGAGGCTGCA 1560  
GGATATGCTC AGACTCTAGA GCGTGGAGC AAGGGGATG GAGCTTCACT CCTTGTCTGC 1620  
CAGGAGTTTG GGGACTCAGA GGGACCACTT GGGGCCAGCC AGACTGGCCT CAATGGCGGA 1680  
CTCAGTCACA TTGACTGAGG GGGACGAGG CTTGTGTGGG TCGAGAGGCG CCTCATGGT 1740  
CTGGTCTGT TGTGTGTAGG TCCCTGGGG ACACAAGCAG GCGCAATGG TATCTGGGG 1800  
GAGCTCACAG AGTTCTTGA ATAAAGCAA CCTCAGAAC CTT 1843

Seq ID NO: 69 DNA Sequence  
Nucleic Acid Accession #: NM\_001216.1  
Coding sequence: 43..1422

5	1	11	21	31	41	51	
	GCCCGTACAC	ACCGTGTGCT	GGGACACCCC	ACAGTCAGCC	GCATGGCTCC	CCTGTGCCCC	60
	AGCCCCCTGGC	TCCCTCTGTT	GATCCCGGCC	CCTGCTCCAG	GCCTCACTGT	GCAACTGCTG	120
	CTGTCACTGC	TGCTCTTGAT	GCCTGTCCAT	CCCCAGAGGT	TGCCCCGAT	GCAGGAGGAT	180
	TCCCCCTTGG	GAGGAGGCTC	TTCTGGGAA	GATGACCCAC	TGGGGAGGA	GGATCTGCCC	240
10	AGTGAAGAGG	ATTCAACCCAG	AGAGGAGGAT	CCACCCGAG	AGGAGATCT	ACCTGGAGAG	300
	GAGGATCTAC	CTGGAGAGGA	GGATCTACCT	GAAGTTAAGC	CTAAATCAGA	AGAAGAGGCG	360
	TCCCTGAAGT	TAGAGGATCT	ACCTACTGTT	GAGGCTCCTG	GAGATCCCTA	AGAACCCAG	420
	AATAATGCC	ACAGGGACAA	AGAAGGGGAT	GACCAGAGTC	ATTGGGCTA	TGGAGGGGAC	480
	CGGCCCTGGC	CCCGGGTGTG	CCAGGCTGCT	GCGGGCGCT	TCCAGTCCCT	GGTGATATC	540
15	CGCCCCCAGC	TGCGCGCTT	CTGCGCGCT	CTGCGCGCT	TGGAACTCCT	GGGCTCCAG	600
	CTCCCGCCGC	TCCAGAACT	GCGCTGCGC	AACAATGGCC	ACAGTGTGCA	ACTGACCCCTG	660
	CCTCCTGGGC	TAGAGATGGC	TCTGGTCCC	GGGCGGAGT	ACCGGCTCT	GCAGCTGCAT	720
	CTGCACTGGG	GGCTGCAAG	TCGTCCGGC	TCGAGCACA	CTGTGGAAGG	CCACCGTTTC	780
	CCTGCCGAGA	TCCAGTGGT	TCACTCAGC	ACCGCTTTG	CCAGAGTTGA	CGAGCCCTTG	840
20	GGGCGCCCGG	GAGGCTGGC	CGTGTGGCC	GCTTCTTG	AGGAGGGCCC	GGAGAAAAC	900
	AGTGCCTATG	AGCAGTTGCT	GTCTCGCTTG	GAAGAAATCG	CTGAGGAAGG	CTCAGAGACT	960
	CAGGTCCCAAG	GACTGGACAT	ATCTGCACCT	CTGCCCTCTG	ACTTCAGCCG	CTACTTCCAA	1020
	TATGAGGGGT	CTCTGACTAC	ACCGCCCTGT	GCCAGGGTG	TCATCTGGAC	TGTGTTTAAC	1080
	CAGACAGTGA	TGCTGAGTGC	TAAGCAGCTC	CACACCTCT	CTGACACCTT	GTGGGGACCT	1140
25	GGTGACTCTC	GGCTACAGCT	GAACCTCGA	GCGAGCAGC	CTTTGAATGG	GCGAGTGATT	1200
	GAGGCTCTCT	TCCCTGCTGG	AGTGGACAGC	AGTCTCGGG	CTGCTGAGCC	AGTCCAGCTG	1260
	AATTCCTGCC	TGGCTGCTGG	TGACATCTTA	GCCCTGGTTT	TGGGCTCCT	TTTTGCTGTC	1320
	ACCAGCGTGG	CGTTCCTTGT	GCAGATGAGA	AGGCAGCACA	GAAGGGGAAC	CAAAGGGGGT	1380
	GTGAGCTACC	GCCGACGAGA	GGTAGCCGAG	ACTGGAGCCT	AGAGGCTGGA	TCTTGAGGAA	1440
30	TGTGAGAGC	CAGCCAGAGG	CATCTGAGGG	GGAGCGGTA	ACTGTCTGT	CTGCTCAAT	1500
	ATGCCACTTC	CTTTAACTG	CCAAGAAAT	TTTTAAATA	AATATTATA	AT	1552

Seq ID NO: 70 DNA Sequence  
Nucleic Acid Accession #: NM\_003039.1  
Coding sequence: 107..1612

35	1	11	21	31	41	51	
	CTTCTCTCTC	CATTCACTGC	ACGCGTACT	TTGGCTAAAA	GGAGGTGAGC	GGCACTCTGC	60
	CCTTCCAGAG	CAAGCATGGA	GCAACAGGAT	CAGAGCATGA	AGGAAGGGAG	GCTGACGCTT	120
40	GTGCTTGCCC	TGGCAACCTT	GATAGCTGCC	TTTGGTTCAT	CCTTCCAGTA	TGGGTACAAAC	180
	GTGGTCTGTG	TCAAATCCCC	AGCACTGCTC	ATGCAACAAT	TTTCAATGA	GACTTACTAT	240
	GGTAGGACCG	GTGAATTCAT	GGAAGACTTC	CCCTTGACGT	TGCTGTGGTC	TGTAACCGTG	300
	TCCATCTCTC	CATTTGGAGG	GTTTATCGGA	TCCCTCCTGG	TGGGCCCTT	GGTGAATAAA	360
	TTTGGCAGAA	AAGGGGCTTT	GCTGTTCAAC	AACATATTTT	CTATCGTGCC	TGGATCTTAA	420
45	ATGGGATGCA	GCAGAGTGGC	CACATCATTT	GAGCTTATCA	TTATTTCCAG	ACTTTTGGTG	480
	GGAAATATGT	CAGGTGTATC	TTCCAACTGT	GTCCCATGT	ACTTAGGGGA	GCTGGGCCCT	540
	AAAAACCTGC	GGGGGGCTCT	CGGGGTGGTG	CCCCAGCTCT	TCATCACTGT	TGGCATCTCT	600
	GTGGCCACGA	TCTTTGCTCT	TGGGAATCTC	CTTGCAACG	TAGATGGCTG	GCCGATCTCT	660
50	CTGGGGTGA	CGGGGGTCCC	CGGGGGCTG	CAGCTCCTTC	TGCTGCCCTT	CTTCCCGGAG	720
	AGCCCAAGT	ACCTGCTGAT	TCAGAAAGAA	GACGAAGCG	CGGCAAGAA	AGCCCTACAG	780
	ACGCTGCGCG	GCTGGGACTC	TGTGGACAGG	GAGGTGGCCG	AGATCCGGCA	GGAGGATGAG	840
	GCGAGAAAGG	CGCGGGCTTT	CATCTCGGTG	CTGAAGCTGT	TCGGATGCG	CTCGCTGGCG	900
	TGGCAGCTGC	TGTCCATCAT	GCTCCTCATG	GCGGGCCAGC	AGCTGTGGG	CGTCAACGCT	960
	ATCTACTACT	ACGCGACCA	GATCTACCTG	AGCGCGGGG	TGCGGAGGA	GCACGTGCAG	1020
55	TACGTGACGG	CGGGCACCGG	GGCCGTGAAC	GTGGTCATGA	CCTTCTGGC	CGTGTCTGTG	1080
	GTGGAGCTCC	TGGGTCCGAG	GCTGCTGCTG	CTGCTGGGCT	TCTCCATCTG	CCTCATAGCC	1140
	TGCTGGCTGC	TCACTGCAGC	TCTGGCACTG	CAGGACACAG	TGTCTGGAT	GCCATACATC	1200
	AGCATGTCT	GTGTCTCTC	CTACGTCTA	GGACATGCC	TGGGGCCAG	TCCCATACCC	1260
	GCGCTGCTCA	TCACTGAGAT	CTTCTGCA	TCTCTCGG	CATCTGCCTT	CATGGTGGGG	1320
60	GGCAGTGTGC	ACTGGCTCTC	CAACTTCACC	GTGGGCTTGA	TCTTCCGTT	CATCCAGGAG	1380
	GGCTCGGGC	CGTACAGCTT	CATTGTCTTC	GCGGTGATCT	GCCTCTCAC	CACCATCTAC	1440
	ATCTTCTTGA	TTGTCCCGGA	GACCAAGGCC	AAGACGTTCA	TAGAGATCAA	CCAGATTTTC	1500
	ACCAAGATGA	ATAAGGTGTC	TGAAGTGTAC	CGGAAAGG	AGGAAGTGAA	AGAGCTTCCA	1560
	CCTGTCACTT	CGGAACAGTG	ACTCTGAGAG	GGAAGCCAGT	GGAGCTGGTC	TGCCAGGGGC	1620
65	TTCCCACTTT	GGCTTATTTT	TCTGACTTCT	AGCTGTCTGT	GAATATCCAG	AAATAAAACA	1680
	ACTCTGATGT	GGAATGCAGT	CCTCATCTCC	AGCCTCCCCA	CCCCAGTGGG	AACTGTGCAA	1740
	AGGGCTGCCT	TGCTGTTCTT	GAAAGTGGGC	TGCTCTCTC	CATGTGTGG	TGTCAACGAG	1800
	CCCGAGTCAA	TTAAACAGCT	GCTCTCCA	TTTGCTGGTT	CAGCCTTCTG	GTGGCTCTGT	1860
70	GTAACGTGGC	TCCACCTTGA	TGGGTCAACC	TTTGTGTGGC	TCTGGTAAAC	ATAACAACAA	1920
	CTTCTACTAT	AGTGGTGAGA	TGGAAGGAAT	CAAAATTTGC	CAGAGAAACT	AACTCGGTGG	1980
	CCCAACAGG	CTTCCGGGG	CCATGGGCAT	TTGTTTAGAG	CCAAATTCAT	CCTCTTACCA	2040
	GATCTTTTTC	CAGAAATACC	TGCTAGGAA	GGTGTGATGT	CAGAAACAAT	GACATCCAGA	2100
	AAGCTGAGGA	ACAGGTTCTC	GTGGAGACAC	TGAGTCAGAA	TTCTTCATCC	AAATTTATTT	2160
75	GTTAGTGGAA	AATGGAATTG	CTTCTGTGTA	GTAATAAA	TGAACCTGAT	CACTTTTTC	2218

Seq ID NO: 71 DNA Sequence  
Nucleic Acid Accession #: NM\_001252.1  
Coding sequence: 138..719

80	1	11	21	31	41	51	
	GGCTGGTCCC	CTGACAGGTT	GAAGCAAGTA	GAGGCCAGG	AGCCCCGGA	GGGGGCTGCA	60
	GTTTCTCTTC	TTCTTCTTCC	GCAGCGCTCC	GCGCCCCCAT	CGCCCTCTCT	GCGCTAGCGG	120
	AGGTGATGCG	CGCGCGGATG	CGGAGGAGG	GTTGCGGCTG	CTCGGTGCGG	CGCAGGCTCT	180
	ATTGGGTGGT	CCTGCGGGCT	GCTTGTGTCC	CATTGGTGGC	GGGCTTGGTG	ATCTGCTCTG	240



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TGGTGTGCAT CCAGCGCTTC GCACAGGCTC AGCAGCAGCT GCCGCTCGAG TCACTTGGGT  
GGGACGTAGC TGAGCTGCAG CTGAATCACA CAGGACCTCA GCAGGACCCC AGGCTATACT  
GGCAGGGGGG CCCAGCACTG GCGCGCTCCT TCCTGCATGG ACCAGAGCTG GACAAGGGGC  
AGCTACGTAT CCATCGTATG GGCATCTACA TGGTACACAT CCAGGTGACG CTGGCCATCT  
GCTCTCCAC GACGGCTCC AGGCACCACC CCACCACCTT GCGGTGGGA ATCTGCTCTC  
CCGCTCCCG TAGCATCAGC CTGCTGCTC TCAGCTTCCA CCAAGTTGT ACCATTGCTT  
CCCAGCGCT GACGCCCTG GCCGAGGGG ACACACTCTG CACCAACTCT ACTGGGACAC  
TTTGGCTTC CGAAACACT GATGAGACCT TCTTTGGAGT GCAGTGGGTG CGGCCCTGAC  
ACTGCTGCT GATTAGGGTT TTTTAAATTT TATTTTATTT TATTTAAGTT CAAGAGAAAA  
AGTGTACACA CAGGGCCAC CCGGGTTGG GGTGGGAGTG TGGTGGGGG TAGTGGTGGC  
AGGACAGAG AAGGCATGA GCTTTTCTT TCATTTTCTT ATTAATAA

Seq ID NO: 72 DNA Sequence

Nucleic Acid Accession #: NM\_018092.2

Coding sequence: 13..618

1 11 21 31 41 51  
AGCAGGTTTC GAATGCTCTT TACTTCTCTT GTGGAGCAAA AGAAAAAGC AGGAGTATTT 60  
GAACAAATCA CTAAGACTCA TGGAAACAAT ATTGGCATTG CTTGAGGAT TGTCTTGGTC 120  
CTTCTCATTG TTTCTATTTT AGTACAAGTG AAACAGCCTC GAAAAAGGT CATGGCTTGC 180  
AAACCGGCTT TTAATAAAAC CGGGTTCCAA GAAGTGTGTT ATCTCTCTCA TTATGAAGTG 240  
TTTTCACTAA GGGACAAAGA GATTCTGCA GACCTGGCAG ACTGTGCGA AGAATTGGAC 300  
AACTACAGA GAGTGGGGG CTCTCCACC GCGTCCGCT GCATCCAGA CCACCATGT 360  
GGGTCCGAGG CCTCCAGCGT CAAACAAAGC AGGACCAACC TCAGTTCATG GGAGCTTCTT 420  
CTCCGAAATG ACTTTGCACA ACCACAGCCA ATGAAAAAT TTAATAGCAC CTTCAAGAAA 480  
AGTAGTTACA CTTTCAACA GGGACATGAG TGCCCTGAGC AGGCCCTGGA AGACCGAGTA 540  
ATGGAGAGA TTCCCTGTGA AATTATGTC AGGGGGGAGG AAGATTCTGC ACAAGCATCC 600  
ATATCCATTG ACTTCTAATC TTCTGCTAAT GGTGATGTGA ATTCTTAGG TGTGACGTA 660  
CGAGCTCC AGGGCAACAT ACTGTTTCCA GCAGCCAACC CTTTCTCTCC ATCACAACCTA 720  
CGAAGCATG GATTACCGT TAACCTATTG TATGGTATG TTTTATTTCT CTCAGGCACT 780  
CTATATATG TAAACCAATC AAGGAACCTA CTCTATTGAG TGGAAACAAT AATCATCTCT 840  
ATTGCTTGTG GTTCTATATA GGAAGCACTG CCAGTTAAG AGCATTAGAA GAGGTGGTTG 900  
GATGAGCCA GGCTCAGGCT GCGTCTTCTT TTAGCAACA AGAAGACTGC TCTGACTGA 960  
TAACAGCTCT GTCAATATTT TGATGCCACA ATAAACTTGA TTTTCTTTTA CATTCTTTT 1020  
ATTTTTCCTT TCTCTAAAT TAAATTTGTT TATAAGCTA TCGTTTACC ATTTCAATTT 1080  
CTTACATAAG TACAAGTGGT TAATGTACCA CATACTTCAG TATAGGCATT TGTCTTGAG 1140  
TGTGTCAAAA TACAGCTAGT TACTGTGCCA ATTAAGACCC AGTTGTATTT CACCCATCTG 1200  
TTCTCTCTG GCTAATCTCT GTACTCTGCG CTTTAAATTA CTGGGCCCTT ATTCCTTATT 1260  
TCTGTGAGA AATAATAGAT GATATGATT ATTACCTTTC AATTATATT TCTCAGTTA 1320  
TACTAGAAA TTTTATAATC CTGGGATATA TGTACCATG TCAGCTATGA CTAATAATTT 1380  
GAAGAAGATA AAAATTTCTA GCAAGCCTTT GAAGTTTACC AAGTATAGTC ACATTCACTG 1440  
ACAGCCCATC CATTCCAGTA AAGAATCATT TCATTCACTT TGGGAGAGGC CTATAATTAC 1500  
ATTTATTTGG AATGTTTCTC TTCGCTAGAT TGTACATAG CTCCTTCTCT GTTGGTTTTG 1560  
CTTACAGCAT ATGGTAACCA AGGTAGATG CCAGTTAAAA TCTCTAGAAA ATTGGATGAG 1620  
CCTTGAGATT GCTTCTTAAC TGGGACATGA CATTTTTCTA GCTCTTATCA AGAATAACAA 1680  
CTTCCACTTT TTTTAAACT GCACTTTGA CTTTTTTAT GGTATAAAAA CAATAATTTA 1740  
TAAACATAAA AGCTCATGT GTTTTATAGA CTTTGTATAT TATTGTATAC TGTACAACT 1800  
TATTAAATC AAGATGAAAG ACCTACAGGA CAGATTCTCT TCAGTGTTC CATCAGTGGC 1860  
TTTGTATGCA AATATGCTGT GTTGGACCTG GACGCTATA CTTATTGTAA AGACCTTGA 1920  
AATGTGAGA TAAGCTCTT CTTTCTTTT GTTACTGTAT TTAGTTTGTG ATAAATTTT 1980  
CACTGTGTA TATTATGCT CTAATCACT ACACAAATCC CATATTAAAA TATACATTGT 2040  
ACCTGACCTT TTAATCATGT TATTATGCC ACCAAGGTG TGGATCTTAA GGTATGTATG 2100  
GAAGGAACT CATTATCAAA ATTGTAAAT ATACAGACAT GCCATTTAAA AGAGGTAAAT 2160  
TCTGTGTTTC TATATTTTGT TAGTAAATTC TCAATGAAAT AAGTTGAAGT TTCCTGGAT 2220  
TTCAATAACT TTTAAATATT ACATATATGT GTTTTCTCAG ATTAGTAAAA ATTGTGACCT 2280  
TAAATTTAAT ACATATATAC TGCCCTCAG 2308

Seq ID NO: 73 DNA Sequence

Nucleic Acid Accession #: Bos sequence

1 11 21 31 41 51  
GCTGAATGTT TTTTTCATT TCTGAGAGA TGCAAAATGT CATTCACTCA TCTCATTATA 60  
CAACACAGTA CATAAATGTA GCTTCAGAGC GTATTAAGTG CTTTATACA CAATGCTGCG 120  
CTGTGTGGAC CAGGTGGTAG CTCATTTAGG CCCCAAATTC ATTAAGGGCA GGGTCTGACT 180  
CTTAGGCTTC TTAATATTTG GTTTGTGCA TGGTCAAGAG CTGGACCCAC ATGTTGCATA 240  
GCAGCAGGGC TGATATGTTT AAAGACGCTG GGCTTTTCT GCTCTGGGGC CTTTCCCGG 300  
GGTTCGCGT GAGTCCCTCC CCAGTGGGT CTGCCCCAC CCGTGTGGG GGGATTAGCT 360  
CCAGAGGCT GCGCAGGCCC CACCTGGGG AGGCTTGAGG GCAGGGCCCC AAGGCTGAGA 420  
TTCAAGCTTG GGGGAACAGA GCAGGAAGA GACCCGTAC CGAAGTGAG CCGGCGAGG 480  
ACCTAGTCAC ATGGGTAATG GGCAGGGTC GGTCACTGGC TTTGCTCCA GGCACAGG 540  
AGTCTGACT AGTGTGAGC TCCAGCATG GAACACTGGA GTTGGTTCAT TTTGACAGC 600  
AAGCCTCTAA ATGGGTGCTT TGATTACCA CCGCAAGGAG AGGGCAGTTG CCTTTTATG 660  
ACATGTTAAT TCCAGCCAGG TGAGTACCA GGTAGCTCTC ATCTCTGCTC CAGGCTCCCC 720  
TGCGTGTGCG TTTGGCATTG TCAGATAATG TGATCATCA TTGAAGTAC ATTTGAGTTC 780  
CAAAACAGTT TTCTCTTTA ACCATTTCAC CTTCAAGGAGT GATTCTCCTT TGTTTGGCAT 840  
TGTCAAGGAA TGTGATGATC CATTCAATG ACTTTTGAGT TCCAAATAGT GTTCTACTT 900  
TAACCTCTCA AATGAAAAA AAAAAAAA AAA 933

Seq ID NO: 74 DNA Sequence

Nucleic Acid Accession #: Bos sequence

1 11 21 31 41 51  
TTTTTTTTT TCATTAGGA AGTTAAAGTA GAAACACTAT TTGGAACCTA AAAGTCATT 60  
GAATGGATCA TCACATTCCT TGACATGCC AAACAAAGGA GAATCACTCC TGAGGGTGAA 120



	ATGGTTAAAG	GAGAAAAGT	GTTTGAAGT	CAAAATGTCAC	TTCAATGAAT	GATCACATTA	180
	TCTGACAATG	CCAAACCGAC	AGGCAGGGGA	GCCTGGCAGG	AGGATGAGAG	CTACCTGGTG	240
	ACTCACCTGG	CTGGAATTAA	CATGTCATAA	AAAGGCAACT	GCCCTCTCCT	TGCGGTGGGT	300
5	AATCAAGGCA	CCCATTTAGA	GGCTTGCTGG	TCAAAATGAA	CCAACTCCAG	TGTTCCATGC	360
	TTGGAGCTCA	ACACTAAGTC	AGACTGCTCT	GGCCCTGGAG	CCAAAGCCAG	TGACCGACCC	420
	CTGCCCATTA	CCCATGTGAC	TAGGTGCTG	CCCGCTCAC	TTTCGGTACC	GGGTCTCTTT	480
	CCTGCTCTGT	TCCCCAAGC	CTGAATCTCA	GCCTTGGGGC	CCTGCCCTCA	AGGCTCCCCC	540
	AGGTGGGGCC	TGGCCAGCT	C				561
10	Seq ID NO: 75 DNA Sequence						
	Nucleic Acid Accession #: Eos sequence						
	Coding sequence: 1..459						
	1	11	21	31	41	51	
15	ATCATTCGAG	CCACGATTAA	TAATGCCAGC	ATGACTTCCC	CAATTGACAA	TGCTGGACTT	60
	GCAGCAGATG	ACTTCAAAT	GAATGCATCC	TTGCAGACAC	AGATCTCCAC	GGATGCTGAA	120
	GCAGTTAGCT	CGGCCAAGAG	TGAGATAATG	GAGCTGAAAC	AAGTCTCCA	GTCCCTCCAG	180
	CATGAATGCT	AGTCTGCTT	GGCCATGCAA	AGCTCCCCAG	AAGGAACCTT	GGGTGACACA	240
	GAGCTGGCT	ACGTGGCTCA	GCTGTGAGAA	ATTAAGATGT	ATATCAGCAT	CCTGGAGGAG	300
20	CAGATCTGCC	AGATCCGGGG	CGAGACTGAA	TACCAGAAC	CAGAGTATGC	ACAACTGCAG	360
	GACATCAAGA	CAGGCTGGA	GGTGGAGATC	GAGACCTACC	ACCGCTGCT	CGGTGGAGAG	420
	GGAGGTTCTG	AGGCCAGAGA	AGCTGAATCT	AAAGGATGAT	TCTCTGTGGA	CTCCAAAGGA	480
	ATAACCAACA	CAGCTCAATC	GAGGGGAGA	GTGCTTTTT	AAAATTCACA	TAAAAGCAGA	540
	GGAAACAGGC	TGGTGACCGA	TAATGACCAA	CTAATTTTCA	CTCAACACTG	TTCTGATGT	600
25	AAAATTCAAG	AGTAAGATGC	AGGCAGCTGA	GTCTGTCCC	CAGGATGTAA	ATGATGACAC	660
	CTAACAAAGG	CGTCTGAAG	CACTGCAACA	AACTTGGCGC	CACAGAGCTG	CAGCTACTCC	720
	TGTAACTCCT	TCTCAGATTC	TTTTGTCTTA	TGGTTGCGT	TTTGTCTTTA	AAATGCAAAA	780
	TGTGTTTTCC	TTCTTAATCA	TTCTGTGTGC	ATAAACTTTT	TGCTGTGTGC	AAATCA	837
30	Seq ID NO: 76 DNA Sequence						
	Nucleic Acid Accession #: NM_003265.2						
	Coding sequence: 102..2816						
	1	11	21	31	41	51	
35	CACTTTCGAG	AGTGCGCTCT	ATTGCCCACA	CACTTCCCTG	ATGAAATGTC	TGGATTGGA	60
	CTAAAGAAAA	AAGGAAAGGC	TAGCAGTCAT	CCAACAGAA	CATGAGACAG	ACTTTGCCCT	120
	GTATCTACTT	TTGGGGGGGC	CTTTTGCCCT	TTGGGATGCT	GTGTGCATCC	TCCACCACCA	180
	AGTGCACTGT	TAGCCATGAA	GTGCTGACT	CGAGCCACCT	GAGGTGACT	CAGGTACCCG	240
	ATGATCTACC	CACAAACATA	ACAGTGTGA	ACCTTACCCA	TAATCAACTC	AGAAGATTAC	300
40	CAGCGCCCAA	CTTCACAGG	TATAGCCAGC	TAACAGCTT	GGATGTAGGA	TTTAACACCA	360
	TCTCAAAACT	GGAGCCAGAA	TTGTGCCAGA	AACTTCCCAT	GTAAAAAGTT	TTGAACCTCC	420
	AGCACAAATGA	GCTATCTCAA	CTTTCTGATA	AAACCTTTGC	CTTCTGCAGC	AAATTGACTG	480
	AACTCCATCT	CATGTCCAAC	TCAATCCAGA	AAATTAAGAA	TAATCCCTTT	GTCAAGCAGA	540
	AGAATTTAAT	CACATAGAT	CTGTCTCATA	ATGGCTTGT	ATCTACAAAA	TTAGGAAGTC	600
45	AGGTTGAGCT	GGAAAACTCT	CAAGAGCTTC	TATTATCAAA	CAATAAAAAT	CAAGCGCTAA	660
	AAAGTGAAGA	ACTGGATATC	TTTGCCAAAT	CATCTTTAAA	AAAAATTAGAG	TTGTATCGA	720
	ATCAAAATTA	AGAGTTTCT	CCAGGGTGT	TTACGCAAT	TGGAAGATTA	TTTGGCCTCT	780
	TTCTGAACAA	TGTCAGCTG	GGTCCAGCC	TTACAGAGAA	GCTATGTTG	GAATTAGCAA	840
	ACACAGCAT	TGGAAATCTG	CTCTGAGTA	ACAGCCAGCT	GTCCACCACC	AGCAATACAA	900
50	CTTTCTTGGG	ACTAAGTGG	ACAAATCTCA	CTATGCTCGA	TCTTTCTTAC	AACAACCTAA	960
	ATGTGTTGG	TAAAGATTCC	TTTGCTTGGC	TTCCACAAC	AGAATATTT	TTCCTAGAGT	1020
	ATAATTAAT	ACAGCATTGG	TTTTCTCACT	CTTTGCAAGG	GCTTTTCAAT	GTGAGGTACC	1080
	TGAATTTGAA	ACGGTCTTTT	ACTAAACAAA	GTATTTCCCT	TGCCTCACTC	CCCAAGATTG	1140
	ATGATTTTTC	TTTTCACTGG	CTAAATGTT	TGGAGCACTT	TAACATGGAA	GATAATGATA	1200
55	TTCCAGGCAT	AAAAAGCAAT	ATGTTCCAG	GATTGATAAA	CCTGAATAAC	TAAAGTCTAT	1260
	CCAATCTCCT	TACAGTTTG	CGAATCTTGA	CAATGAAGAC	ATTGTATCA	CTTGCTCATT	1320
	CTCCCTTACA	CATACCTCAC	CTAACCAAGA	ATAAAATCTC	AAAAATAGAG	AGTGATGCTT	1380
	TCTCTTGGTT	GGGCCACCTA	GAACTACTTG	ACCTGGGCTT	TAATGAATTT	GGGCAAGAAC	1440
	TCACAGGCCA	GGAAATGAGA	GGTCTAGAAA	ATATTTTCCA	AATCTATCTT	TCCTACACAA	1500
60	AGTACCTGCA	GCTGACTAGS	AACTCCTTTG	CCTTGGTCCC	AAGCCTTCAA	CGACTGATGC	1560
	TCCGAAGGGT	GGCCCTTAAA	AATGTGGATA	GCTCTCCTTC	ACCATTCCAG	CCTCTTCGTA	1620
	ACTTGACCAT	TCTGGATCTA	AGCAACAACA	ACATAGCCAA	CATAAATGAT	GACATGTTGG	1680
	AGGGTCTTGA	GAAACTAGAA	ATTCTOGATT	TGCAGCATAA	CAACTTAGCA	CGGCTCTGGA	1740
	AACACGCCAA	CCCTGGTGGT	CCCAATTATT	TCTTAAAGGG	TCTGTCTCAC	CTCCACATCC	1800
65	TTAACTTGGG	GTCCAAAGGC	TTTGACGAGA	TCCAGTTTGA	GGTCTTCAAG	GATTATTTTG	1860
	AACTAAAGAT	CATCGATTTA	GGATTGAATA	ATTTAAACAC	ACTTCCAGCA	TCTGTCTTTA	1920
	ATAATCAGGT	GTCTCTAAG	TCATTGAACC	TTCAGAGAA	TCTCATAACA	TCGGTGGAGA	1980
	AGAAGGTTT	CGGGCCAGCT	TTCAAGAAC	TGACTGAGTT	AGATATGCGC	TTTAATCCCT	2040
70	TTGATTGCAC	GTGTGAAAGT	ATTGCTTGGT	TTGTTAATTG	GATTAAACGAG	ACCCATACCA	2100
	ACATCCCTGA	GCTGTCAAGC	CACATCTTTT	GCAACACTCC	ACCTCACTAT	CATGGGTTCC	2160
	CAGTGAGACT	TTTTGATACA	TCATCTTGCA	AAGACAGTGC	CCCTTTTGAA	CTCTTTTCA	2220
	TGATCAATAC	CAGTATCCTG	TTGATTTTAA	TCTTTATTTG	ACTTCTCATC	CACTTTGAGG	2280
	GCTGGAGGAT	ATCTTTTAT	TGGAATGTTT	CAGTACATCG	AGTTCTTGGT	TTCAAGGAAA	2340
	TAGACAGACA	GACAGAACAG	TTTGAATATG	CAGCATATAT	AATTCATGCC	TATAAAGATA	2400
75	AGGATGGGT	CTGGGAACAT	TTCTCTTCAA	TGGAAGAGGA	AGACCAATCT	CTCAAAATTT	2460
	GTCTGGAAGA	AAGGCACTTT	GAGGCGGGTG	TTTTTGAAGT	AGAAGCAATT	GTAAACAGCA	2520
	GTCAAAAGAG	CAGAAAAATT	ATTTTGTGTA	TAACACACCA	TCTATTAAAA	GACCCATTAT	2580
	GCAAAAGATT	CAAGGTACAT	CATGCAGTTC	AACAAGCTAT	TGAACAAAAT	CTGGATTCCA	2640
	TTATATTGGT	TTTCTTGGAG	GAGATTCAGC	ATTATAAAT	GAACCATGCA	CTCTGTTTGC	2700
80	GAAGAGGAAT	GTTTAAATCT	CAGTGCACTC	TGAACCTGGC	AGTTCAAGAA	GAACGGATAG	2760
	GTGCTTTTGC	TCATAAATTG	CAAGTAGCAC	TTGGATCCAA	AAACTCTGTA	CATTAAATTT	2820
	ATTTAAATAT	TCAATTAGCA	AAGGAGAAAC	TTTCTCAATT	TAAAGAGTTC	TATGGCAAA	2880
	TTAAGTTTTC	CATAAAGGTG	TTATAATTG	TTTATTCATA	TTGTAAATGT	ATTATATTCT	2940
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TTGACTTAAT TTTACCCAAA ATAAAAATA TAAGCACGTA AAAAAAAAAA AAAAAA 3057

Seq ID NO: 77 DNA Sequence

Nucleic Acid Accession #: Eos sequence

5  
1 11 21 31 41 51  
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10 GGTGTGAAGG GAGGCAGCAC TCTAGGATAA ACACAGACT TGGCGATTGT TTGGGAATAT 240  
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AGAAAGACCA AGGAGGCAC TAAATATTAC GGTACCTTAA ATACGTGAGA CATGAGGCAC 420  
TCAGGATGCA GGAGGTTTCA ATTTGACAGG ATGGATGCAC ACTGCATGAC CCACAGTTCA 480  
15 GCTGGTGTGA TCATTCCACC CAACTTGCCC CCTCTCCCGT GTGTTGACCC ACCCCAGCAC 540  
CTGCTCCTG CTCTCAGAA TGTGTTTTAC ATTTATTATA TAAACGATGT TATTGAGCA 600  
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Seq ID NO: 78 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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25 TGGGTGGAAT GATCGATCAC ACCAGCTGAA CTGTGGGTCA TGCAGTGTGC ATCCATCCTG 180  
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ATATTATAGT CCTCCTGGT CTCTCTGCTC CTCTTGTACT CTGTACACAC GAATACGTTG 300  
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TTTCTGTCT TCTACAGCAG AATTGGATAT TCCCAACAA TCTGCAAGTC TGGTGTATTAT 420  
30 CCTAGAGTGC TGCTCCTCT CACACCCCTC AGTTTCAAAC AGTCAGCAAG CCTGCCCAT 480  
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Seq ID NO: 79 DNA Sequence

Nucleic Acid Accession #: Eos sequence

Coding sequence: 315..1416

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45 GCCAGAACAG CTGAGACATC CGTCCCTCTA CAAGAAACTC TCCCGGGGTG GAACAGATG 360  
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50 ACTGTCCCCT TCTGGGCTCA CTATGCTGCC GCCCAGTGGG ACTTTGGAAA TACAATGTGT 660  
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GTCACTCTTG GGGTGGTGAC AAGTGTGATC ACTTGGGTGG TGCTGTGTTT TGCTCTCTCT 840  
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55 CTCCATACA GTACATATCA ATTCTGGAAG AATTTCCAGA CATTAAAGAT AGTCATCTTG 960  
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65 GGAGAGGTCT TTTTAAAGAG GAAGTACTGT TTATAGAGGG TCTAAGATTCT ATCCATTAT 1560  
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		TTTAACCGTC	AATAGGCAAA	GGGGGAAGG	GACATATTCA	TTTGAAATA	AGCTGCCCTG	3060
		AGCCTTAAAA	CCCAACAAAG	TACAATTAC	CAGCCTCCGT	ATTTGAGACT	GAATGGGGGT	3120
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10		AAAAATCGT	CTCTCCCTCC	CTTTGAAAT	AATATACCCC	TTAGTGTITG	GGTATATTCA	3240
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15		GGGAAATGTC	TTTCTTTTGG	CTCTTAAGTT	GTGAGAGTGG	CAACAGTAGC	ATAGGACCCCT	3540
		ACCTCTCGGG	CCAAGTCAAA	GACATTCTGA	CATCTTAGTA	TTTGATATT	CTTATGTATG	3600
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Nucleic Acid Accession #: Eos sequence								
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25		GTAAGTACTA	ATAGTAAAT	TATAGTAAGA	GAAATAACAA	TAGCTAGAAT	GGATGAAT	240
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		AGAGACCCCT	TCATATTGTT	TTATACTCAG	TACCTGTITTT	TTTTTTTTTT	TTTTAAAAAA	360
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30		CTGGCTTAA	CCTAGTAGTT	AAAATCAAC	TCATGACTTA	GAAACCGATG	TTATTCTATG	480
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		TGCCAGAGCA	CGCATAGCA	GGCTCCGAG	AAGGATTAA	ACTGGCTGAA	CACCGGGAAG	960
		GAACTGGCAC	TTGAATCCCA	GACATCTGAA	GCTTGTCAAG	ACTAGTCTTT	GGAACCTGCC	1020
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		TCCTCCATCT	CCTCCGAGC	CAACTTCCTC	AAACCACTG	AAGAAAAAGT	GCTTAGGTAG	300
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		ATCCTGATCC	TGATCAAGCA	CAGGCTTCA	CAGTGACATT	TCACCTGTAG	CCTGGCCGAC	1860
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	2460	GTCTCATGT	TCACGTGGTT	CTCAGTGACT	GGGTGATTGA	QNNNNNNNN	NNNNNNNNNN	2520
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	6180	GTGTGTCAT	TGGGGGGGCC	CGTGACGACG	GAACACTCTC	CCCATCAAA	TTCTCTGGG	6240
	6300	CACAGTGGAG	AGCCATGAGT	GGGGGCTGTC	CTGGGGGCTG	CGCTATGGTG	AGTGAGCCCA	6360
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	6540	AGTTTATAAG	CAACAGACAC	AGTACCTGGA	ATGTAAGAGG	CGCTTGCTCT	ATAAAAGAGA	6600
	6660	GAAGAAAGGA	ACCCCTTTCA	CCACGAGGGA	CGTCAGGCCC	AGCTCTCTGT	CCCGGGCAAT	6720
	6780	CATCTTTTTC	CCGGCAATTA	GCTTCAGCTC	TAATGACCTG	CTGTCTGCTT	TATGTTGCAC	6840
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	7260	AGGCAGGAGT	CATAATGGGG	CCCTGGCTTC	TGGGCAATTC	CCATAAAACA	TTGTGCCACC	7320
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	8100	TTCAGCACTC	ACTATGCTCT	CTGTTTGGTT	TGGCCAGGAT	GGCCTGGGAG	TCCCCAGGGC	8160
	8220	CGGGCAAGAA	CTGCCCCCAA	CAGACATGGG	CGGAGGGAAC	CGTCTCACCC	CTGCCCTTTC	8280
55	8340	TCCCTTCTCT	ACGCATGTCT	AGTGGGACGG	GAGGGTGGTC	TGCCCGGGGC	TTCAAGCTCC	8400
	8460	TGTCAGGAGG	CCGGAACCCAT	GTGTACGCC	AGTGACGCCA	CACGCCCAGC	TTGAGGTTGC	8520
	8580	TCATGGAGGT	CTCAGGTGCT	GAGATGGGCA	TCTTCTTGTG	GCCACTATGC	CCGCTGAGCC	8640
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Nucleic Acid Accession #: Eos sequence  
Coding sequence: ..651

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	CCTGGGCCAG	CAGGACTCAA	AGGGGAAGCA	GGGAGATGG	GCTTGTCCGG	CCTCCCGGGC	180
70	GCTCAGCGCC	TCAAGGGGGA	GAAAGGGGAG	TGGGCATCTG	ACAGCCTACA	GGAGAGCCTG	240
	GCTCAGCTCA	TAGTGGAGCC	AGGGGCCCTT	GGCCCCCTG	GCCCCCAGG	CCGATGGGCT	300
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	GCTGAGAGAG	CGCCAGCGGG	CCTGCTGGG	CCAGTTGGCC	CACCGGGCCT	TATTGGGCTG	420
	CCAGGAACCA	AAGGAGAGAA	GGGCAGACCC	GGGGAGCCAG	GACTAGATGG	TTTCCCTGGA	480
75	CCCCGAGGAG	AGAAAGGTGA	TCCGAGCGAG	CGTGAGAGAG	AGGGAGAACG	AGGGGTCCCC	540
	GGCCGGAAGG	GAGTGAAGGG	CCAGAAGGGC	GAGCCGGGAC	CACCAGGCTT	GGACCAGCGG	600
	TGTCCTGGTG	GGCCCGACGG	GCTGCTGTG	CCTGGCTGCT	GGCATAAGTG	ACCCACAGGC	660
	CCAGCTCACA	CTGTATACAGA	TCCGTGTGGA	CATTTTTAAT	TTTTGTAAAA	ACAAAACAGT	720
	AATATATTGA	TCTTTTTTCA	TGGAATGGCG	TACCTGTGGC	CTTTTAACT	TCAAGAGTAT	780
80	GCCCCACCA	CCCCAAAGCC	ACCGCATGT	GAAGCTGCCG	GAAAGTGGAC	AGGCCAGACC	840
	AGGGAGATGT	GTACTGTAGG	GGCACCTTGT	GGCCTGGGCT	TTCCAGGAAA	GGAGATGAAG	900
	GTAGAAGCAC	CTGGCTCGGG	CAAGGCTAGA	AAGATGCTAC	GTGGGGCTT	CAGTCACTGC	960
	ATCAGCAGAG	AGACTCTCAG	CTGTGGTACT	GCCTGTAAAG	AACCTGCCCC	CGCAAACTCT	1020
	TGGAGTCCCT	GGGACACACC	CTATCCAGAA	AGACCCAGGG	GTGGAACAGC	GGCTGCTGTT	1080

5 GCTCCTGGCC TCATCAGCCT CCAAACTCAA CCACAACCAG CTGCCTCTGC AGTTGGACAA 1140  
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 Nucleic Acid Accession #: Eos sequence

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 20 CTGACGGCCT CAAGGGGAG AGGGGGAGT CGCATCTGA CAGCTACAG GAGAGCCTGG 240  
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 25 CCGAGGAGA GAAAGTGAT CCGAGCGAG GTGGAGAGAA GGGAGAACGA GGGGTCCCC 540  
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 30 CCCACCCAGC CCCAAAGCCA CCGCATGTG AAGCTGCGG AAGTGGACA GGCAGAGCA 840  
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 60 TCTCCAGTCC ATGGTTCCCT GGTGTTCTTA GAGTCTATT AAAAAAAAAA AAAAAAAAAA 539

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 70 AACTCAGGCT CAAGCAATCC TCCCGCTCA GCCTTCCAAG TAACTAGGAC TACAGGCATG 180  
 TGCCACCAAG CCTGGTGTCT GAGATGTGTC CACCGCAGAA GAAAGCCTGG GAGTCCATGG 240  
 CTAAGGGGCT GGTGCTGGGC GCGCTCTTCA CTAGTTTCTT GCTGTGGTGG TACTCTATG 300  
 CCGTGCCCCC GCTGCAATGCC GGCCTGGCCT CCACGACCCC GGAGGCGGCA GCGTCTGTCT 360  
 CTCACCTGAC ACTCGAGCCA GAGGCAGTGA TCCGGGCCAA CGCTCGGCG GGGGAGTGCC 420  
 75 AGCCGGGGGG CAACATCGTG TTCTGAAGA CGCAACAAGC GGCCAGCAGC ACCCTGCTCA 480  
 ACATCCTGTT CCGCTTCGGC CAGAAGCACC GGCTCAAGTT CGCTTCCCT AACGGCCGCA 540  
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 TGGCGACCAA GCGCATCTTC ATCAGGTGTC TCCGCGACCC CGCCCGCTTG TTGAGTCTCT 720  
 80 CTTTCCACTA CTTGCGGCGG GTGGTGGCCC TCAAGTGAAA GCTCTGGGCC GCGGCAAGC 780  
 TGACCGAGTT CCGTCAAGAC CCGGATCGCT ACTACGACCC CAAAGGCTTC AATGCCACT 840  
 ACCTCGGAAA CCGTCTCTTC TTGACCTGGT GCTATGACAA CAGCCTGGAC CCCAGCAGCC 900  
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 AGTACTTCGA CGAGTCGCTG GTGCTGTGTA AGGACCTGCT GTGCTGGGAG CTGGAGGAGC 1020  
 TGCTTACTTT CAAGCTCAAC GCGCGCCGCG ACTGCGCGGT GCGCGGCTG TCGGGGGAGC 1080

	TGTATGGGCG	CGCCACCGCC	TGGAACATGC	TGGACTCCCA	CCTCTACCGC	CACCTCAACG	1140
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	CCCTGGCCCA	TGCCAAGCAG	CGCATGCGGA	CCATCTGCAT	CGACGGGGGC	CACGCGGTGG	1260
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5	TCTCTGGGCTA	CAACCTCAAG	AAGAGCATCG	GGCAGCGGCA	CGCGCAGCTC	TGCCGGGGCA	1380
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	TCTGGAAGTT	CATTGGCGAT	TTCTGGCGGT	GGTGACCTCC	CACCGCCAGC	CGGCTTGCCCT	1500
	GCCTGTCTGC	TCCCTGCAGA	GGGGCTGAGC	AGGAGCGCGC	TGGTGTGGC	CGCCCCAGC	1560
10	CCCTCTCTGG	TGCCACCTCA	GACCCCGGGG	TGAGGGGGGG	CTCCCTGGGG	GGAGGCGAGC	1620
	AGCCAAGACT	GGGCCATGA	ACACAGAGAG	GGCCTAACCG	AGATCAGTAT	TTAACTAATT	1680
	ATACAGTTT	TTATTAAACC	CCTTCCCTC	CCCGATAAAG	AATGTCTCTAT	TTCTGCCTCC	1740
	CCTTAAAGG	GAGACCTCAG	AAGTAAAGGA	ATTGTATGTT	GTGTTTTTGT	T	1791
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	TGGCCAGGGG	GAAGGGGGGC	CGCCGCCCGC	TCCCGTTTTT	GGGCAGCCCT	GGCCAGCTCC	180
	CTGTGGCCTT	GSAGGACTTC	CACCGGGCAG	GCGTCCCAT	GATGCCAGGC	TACCAAGGCG	240
	GGGGGATTCC	TGCAGGCCCG	CGCTGCTTTT	CTTAGAACCC	CCTTTCTAGA	AAAGTACACC	300
25	TGGAGGTTTT	GCTTCAAGA	GAGGAGAGGC	AGCAGCATGG	CGAGTGTCTT	GTCCCAAGCC	360
	CTTGGAAAGC	GGTCCCTCCT	GGGAGCCCGG	GTGTTGGGAC	CCAGTGCCCT	GGAGGGGCC	420
	TGGCTGCCCC	CACCTCCGGA	GCCACTGCTA	GAAGGGGGCG	CTCCCCAGCC	TTTCAACACC	480
	TCTGATGACA	CCCCCTGCCA	GGAGCAGCCC	AAGGAAGTCC	TTAAGGCTCC	CAGCACTCCG	540
	GGCCTTCAGC	AGGTGGCCTT	TCAGCCTGGG	CAGAAGGTTT	ATGTGTGGTA	CGGGGGTCAA	600
30	GAGTGACAG	GACTGGTGGG	GCAGCAGCAG	TGGATGGAGG	GTCAGGTGAC	CGTCTGGCTG	660
	CTGGAGCAGA	AGCTGCAGGT	CTGCTGCAGG	GTGGAGGAGG	TGTGGCTGGC	AGAGCTGCAG	720
	GGCCCCGTGC	CCCAAGCACC	ACCCCTGGAG	CCCGAGGCC	AGGCCCTGGC	CTACAGGCC	780
	GTCTCCAGSA	ACATCGATGT	CCCAAGAGAG	AAGTCGAGC	CAGTGGAAAT	GGATGAGATG	840
	ATGGGGGCCA	TGGTGTGAC	GTCCCTGTCC	TGCAGCCCTG	TGTACAGAG	TCTCCCGGG	900
35	ACCGAGGCCA	ACTTCTGTGC	TTCCCGTGGG	GCCTCGGACC	CATGGAAGGA	GAGTGGTGAC	960
	ATCTCGGACA	GGGCGAGCAG	CACCTACCAGC	GGTCACTGGA	GTGGAGCAG	TGGTGTCTCC	1020
	ACCCCCCTGC	CCCCCAACCC	CCAGGCCAGC	CCCAAGTATT	TGGGGGATGC	TTTTGGTTCT	1080
	CCCCAAATCT	ATCATGGCTT	TGAGACCGAT	CCTGACCCCT	TCTGTCTGGA	CGAAACAGCT	1140
40	CCACGAAAAA	GAAGAAGTCT	TGTGAAGGTG	ATGTACAAGT	GCCTGTGGCC	AAACTGTGGC	1200
	AAAGTCTGCG	GCTCCATTGT	GGGCATCAAA	CGACACGTCA	AAGCCCTCCA	TCTGGGGGAC	1260
	ACAGTGGACT	CTGATCAGTT	CAAGGGGAGG	GAGGATTCTT	ACTACACAGA	GGTGCAGCTG	1320
	AAGGAGGAGT	CTGCTGCTGC	TGCTGCTGCT	GCTGCGCAG	GCACCCAGT	CCCTGGGACT	1380
	CCCACTCTCG	AGCCAGCTCC	CACCCCCAGC	ATGACTGGCC	TGCTCTGTCT	TGCTCTTCCA	1440
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	AGCTTCAGCG	AGCCCCAGCA	GCCAGCACCT	GGGATGAAT	CTCATCTGAT	CGTCACTTCT	1740
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50	GTGTATGGCA	TGGAGCACCG	GGACCACTGG	TGCACGGCCT	GCCGGTGGAA	GAAGGCGTGC	1860
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	AAACACGGAG	TTTGGGCTCT	GTGGCTAAG	GTGTAAACAT	TAAAGCAATT	TTCTCCCAT	2040
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55	GAGAGCCAAA	ACTGACCAAG	GCTATTACAG	AGTGAACAGG	TGACCAAGAA	ATTAATTACC	2160
	CTCCGTTTTCC	CACATCCCCA	CTCTCTAGGG	GATTAGCTTG	TGCGTGTCAA	AAGAAGGAAC	2220
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	GACTGTGAGC	AAGATGAATT	TACTTTTCTT	AAAAAAAATA	AAAAAAAATA	AAAAAAGAG	2340
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60	CCCTTCTCGG	AGGGTACCTC	CTGTTCCCTG	TCTGAGCATC	CTGCATGGAA	GTCAAAGGAA	2460
	ATCCCTTTCT	TGGTGAGGAC	TAAATCTCG	GTTCCCTCAG	ACATTGGGTT	GCACCCCAAC	2520
	AAATATTAAA	TGCTCTTCT	TAAAGCCCA	GAGAAAGAGG	TTTTTTAAAA	GACTGTGCCC	2580
	AAATAGCTGA	GCCAAAAGGC	TGATCAGAAAT	TCACTTTTGG	GAATGTGGCA	GTTAAACACT	2640
	ACCTTGATCA	TTCTCTCTC	TTTCTCTCAG	GAACTCTTGG	AGGGTTTGAG	CGTCTGGAAG	2700
65	CTCTCTGCTC	TGACCCGAGG	AAGCACCTTC	CTGACGCGCG	CTTCTCTCGG	TTATTGAAAG	2760
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	CTCCCTGGCC	CACCAAGGAT	TTCCCATTTT	CTGTTTGGTG	CCTGAAAGCA	GGATGAGGAA	2940
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70	TGGGTTTGGG	TTAGTGGCTG	CTGGGTTTTT	GGCCCTTGGT	GTTTCTGGAG	CCTCCAGGGA	3060
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	GCCCGGATGG	CAGGGCATGT	TTCTGTTTTG	GTGTCTCACT	TTCTCCCGAG	CGTGAATTAT	3240
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	GCTTTTAAAT	GCAGGACACT	TTGAGTGTTA	CAAAATCTGT	AGACCTGGCA	GTAGGGTCAT	3540
	GATGTTGGGA	AGGGTGTAGT	GGCTTAGGTT	GGTGACAGAA	GGGACAGACA	CTGTGTCACA	3600
80	GGTGTCTTTG	GTGATGGGGT	TTTTTTTTTT	ATAACTTAGT	AAAAAAAATA	AAATGTATGT	3660
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	CTTCTGTGCC	CTTGATCTCT	CTTGAGAAAT	AAGAGCTGGC	AGCTGTCTAT	GGTGTTCCTC	3780
	AAACCCCTCT	ACTTCCCAAG	ACAACCCCCA	GCTTCAGGTC	CTCATGGGGA	GGGGAGGGCA	3840
	CGTCTTGAC	ACATGGGAAC	TTGGCTCAGG	AGGGCTCTCC	CTTCCCTCT	CCCTCAGAGT	3900
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Seq ID NO: 101 DNA Sequence  
Nucleic Acid Accession #: AF258592  
Coding sequence: 93..1268

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Seq ID NO: 102 DNA Sequence  
Nucleic Acid Accession #: Eos sequence

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Seq ID NO: 106 DNA Sequence  
Nucleic Acid Accession #: NM\_004585  
Coding sequence: 62..556

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TGAGTACCCC GGGGCTGGCT CCTCCAGTGT CTTCTCAGTC CTGAGCAACA GTGCAGAGGT 240  
GAAAGCGGGG CGCCTGGGAG ATGTGGTGGG AGGCTGTTGC TATCGGTCAC ACAACAGCTT 300  
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TGCTCAGAAAT ATGAAGTACA GTATTGTGAG CAGGAACGTG GAGCACTTTG TCGCCAGCT 420  
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CAGCGCGCTT GGAATCCTGT TTGTGTCTGG ATGCTCTTTT GCGATTAGGA GATACCAAAA 540  
AAAAGCAACA GCCTGAAGCA GCCACAAAAT CCTGTGTTAG AAGCAGCTGT GGGGGTCCCA 600  
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Seq ID NO: 108 DNA Sequence

Nucleic Acid Accession #: NM\_000358.1

Coding sequence: 48..2099

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GCCCCAAGCT GTGCTCTGTG CAGAAGGTTA TTGGCACTAA TAGGAAGTAC TTCAACCACT 240  
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Seq ID NO: 109 DNA Sequence

Nucleic Acid Accession #: NM\_145648

Coding sequence: 59..1792

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Seq ID NO: 110 DNA Sequence  
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Coding sequence: 48..881

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Coding sequence: 286..1608

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Seq ID NO: 122 DNA Sequence

Nucleic Acid Accession #: NM\_020142.2

Coding sequence: 274..537

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Seq ID NO: 123 DNA Sequence

Nucleic Acid Accession #: Eos sequence

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Seq ID NO: 124 DNA Sequence

Nucleic Acid Accession #: NM\_002204.1

Coding sequence: 74..3229

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TACCCGATTC CTGGTAGTGA AGGAGGCGCG GAACCCGGGC AGCCTCTTGG GCTACTGGGT 240
CGCCCTCCAT CGGCAGACAG AGCGGCAGCA GCGCTACCTG CTCTGGCTGT GTGCCCCCGG 300
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Coding sequence: 74..3274

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Seq ID NO: 126 DNA Sequence

Nucleic Acid Accession #: NM\_003786

Coding sequence: 71..4654

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Seq ID NO: 141 DNA Sequence

Nucleic Acid Accession #: NM\_032636.2

Coding sequence: 102..1103

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Seq ID NO: GAD8 DNA Sequence

Nucleic Acid Accession #: NM\_022123.1

Coding sequence: 76..2781

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Seq ID NO: 145 DNA Sequence  
Nucleic Acid Accession #: XM\_045127.3  
Coding sequence: 21..4469

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CCTCCAGACC TATGCTCCCA CTTTCTCTA GATCCATGGA AATCTCAGAG ACGAGTGTG 180

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	GCCGCTCTC	TGTGCGGGG	TCACCTGATC	CTACTGCTGG	CTCCTTGTCT	GTGCTGAAA	300
	CCCAAGTGAC	GCCATCCAGC	GTGACCACTG	CATTTTTCTC	GGTCATCACC	AGCATTCTCC	360
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5	CGAGTGTITT	TACGCTTAT	AGTCTGGTTC	CTTCAGTGGA	GTCTTCACTT	TTCTCTGACC	480
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	TTTTCTCAAC	ACCCCGCTG	GAATCAGCG	GCTCCATCTC	TTGCGCTTGG	GAAGCACCTG	600
	GGTCTCTGTC	TCTGATGCCG	AGTGACTTGT	CCCCCTTCAC	ATCTCAGTCT	TTTTCTCCCT	660
	TGGTTGAGAC	ATTTACATTG	TTTGACTCTA	GTGATCTGCA	GTCACTCAG	CTGTCTCTTC	720
10	CCAGTTCCAC	AAATCTTGAG	TTTTGCGAGC	TCCAGCCAG	TTCCGAGCTG	CCTTTAAACA	780
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	CTCTGAGATT	TGTTGAAGCG	TCTACGGTTT	CACCTGAAGG	TTGAGAACT	CATTTTACCT	900
	CAGCTTTCAT	TGAAACTACC	TCCTATCTTG	AGTCTTCACT	CATTTCCCAT	GAATCCGCG	960
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	CAACTCTGAC	ACCTCTTGAC	GACCAATCA	GTGCTCTAGA	CGGTCACTG	TCTGTCTGG	1140
	CCTCTTCTTC	CAAGCCCAT	CCCACTGGTA	CGGTGTTGAT	CAGTCACTG	TACCTGCCAT	1200
	CAGGATCTCT	GTTTGTTTTT	GAAGCAACCC	CCTTCCCTCT	GCCACAGAG	CTGACCGTGG	1260
20	GAGGCCCATC	ACTCACACCC	ACAGAGGTGC	CACTGAACAC	CTCCACGGAA	GTGACCAACA	1320
	CCAGCAGCGG	TGCTGCCATC	GGTGGTCCCG	TGAGTCCAC	CCTGATGGGT	GAGCGCGCAA	1380
	GTGAGAGCCC	CCGAGAGAGT	AGTGTGCTC	CTCCCTGCTC	ATCCCTGGGT	CCGCTGACTG	1440
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	TTTGTGATAT	CACAGTCCCG	GATGCTATC	TGATCAACA	TGTGCTGGCC	AGAAGAGCTG	1560
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25	TGGAATCTGAA	GGTTTACGAA	CTATTTACTG	ACTTCACTTT	TCTGTAACA	TCCGCTCCTT	1680
	TGTTTACAC	GGCAATATCC	GTCAATAATG	TGCTATAAAA	CAGTAAGCTT	GTCCGTGACC	1740
	AGACTCCTTT	AATCTGTCT	GTGAAACCTT	CTTTCCTTGT	GCCAGAGTCC	AGGTTCCAAG	1800
	TTCAACAGT	ACTTCAGTTT	GTGCTCCGA	GTGTTGATAC	TGCTCTTCTG	AACCTTCAACC	1860
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	GTATATAGCT	CACGGTGCAG	ATCTTGAATA	TCACATCAG	TTCTTCAAGG	GAGACTCTCT	1980
	GGCGGGGCC	GGTGAATATC	ATCTTTGCGG	TTAAAGCAC	ACAGGGATTT	TTGAATGGGT	2040
	CGAGAGCTGC	CGAGCTGCTC	AGAACTTGA	GTGTTGTTGA	GTTCACTTTC	TATCTGGGAT	2100
	ACCCAGTGTG	GCAGATCCGA	GAGCCCTTCC	AGTATCCACA	GCTCACTTAA	TCTCAGTTGC	2160
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	GAAGCGGAT	GTGAGAAAG	GCCACTGTAG	CTGACGGAA	CAGTGTGGTG	CAGGTGGTAA	2340
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40	AGAGAGCAGC	CATCATCTTG	GGTTACGGAA	TTCAAGGTGT	CATTGCCAG	CTCTGTGACA	2520
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	CGAAGTGCAG	CTGTTGGTGG	ATGGTGATTG	TTGTATCCT	CTACTGAGAA	CTATGCGCGA	2640
	CAGACAAGCT	AGACTTTTCT	CCTGACACTG	TGGCCAACT	TCAGCAGCGT	CAGAGCTGCG	2700
	AGATGCTGAG	TGTGAAGGCG	TTGATTTTGT	CTAAGCAGCA	TCTGGGTGAG	CACAATAAAG	2760
45	ACGACATATT	GATTATTCTAT	GAGCCAGCGC	CAGTCCAGG	ACCTCTGAAG	GACCAACCA	2820
	CGCCCTCCGA	AAATGGAGAC	GTGCCAAGCC	CCAAGTCAA	GATCCCTTCC	AAGAATGTTT	2880
	GTCAAGAGG	AAGAGTTTCT	CCCTCAGATG	CTGACTCTAC	GGTCAGTGAA	GAGTCCAGCG	2940
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	CGCAGAGCGG	GCCACCACTG	CCCAAGTCCG	GAAATGAGCA	GCACCTATCA	GCCTTCACT	3060
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	ACCGAGTGGC	GGAAAGCAAT	AAATCAACA	AAGAGATTCA	GACCGCGCTG	CGGCAACAAGT	3240
	CTGAGCTGAG	GACCACTGCG	AACAAGATCC	GCTTGGCGCG	CAAGCGCGCG	GGGCACTAGG	3300
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55	CGAGGCGACA	GATGACATC	GACAAGATCC	TGGACCCAC	GGCCAGCGTG	CCTTCCGTGT	3420
	TCATAGAGCC	CAGGAAGAGC	TCACGGATAA	AAGTTCTCTC	CAAGCCTCGC	CGGAAACACC	3480
	AGGTCAACGG	CTGTCTTGGC	GACGCTGAGA	AGGACCGGCT	CATCACCACA	GACAGCGATG	3540
	GACACTACAG	GAGGCCCGCC	GGCGTCCACA	ACTCAGCCTA	CATCGGATGC	CCATCGGATC	3600
	CTGACCTCCC	AGCGATATGT	CAGACACCAT	CCTCGGTGGA	ACTGGGAGG	TATCCAGCCC	3660
60	TTCCCTTCCC	GGCTTCCAG	TACATCCAC	CCAGCCGCTC	CATGAGGAG	GCAAGCCAGA	3720
	CCATGCACTC	CCTCTGGAC	GACGCTTTG	CCCTCGTGGC	CCCGAGCAGC	CAGCCTGCCA	3780
	GCAACCGCAG	TGTAGGCCCG	GGAGTCCAC	CGGCGTGGC	CGCAACAGC	ACCCCTTCCC	3840
	AGGAAGAGAG	CGGAGCCACC	CAGTGGGGGT	CCTTCTACAG	CCAGCCCA	ACGGCCAACA	3900
	ATCCCTGACG	TAGATACGAA	GACTATGGAA	TGACTCCCC	GACGGGTCCA	TTGCCAAGAC	3960
65	CAGGTTTGG	CCCCGTTTG	CTGCACTTA	CAGAGCTGGT	GCCCCCTGAC	CCTCAGCAGC	4020
	CACAGGCTC	CGCCGAGGCC	CCATTGTGCT	CCAGAGGAT	CTACTCGAG	GAGATGCCGT	4080
	CGGTGGCCCG	GCTTGGGCT	GTGCGGGTA	CCACAGGCTC	CCAGATCCAG	CACCTGACAC	4140
	AGGTGGGAT	TGCCAGCAGA	ATTGAGGCTC	AGCCAGTGA	AATCCCGCA	AGCAGAGGCA	4200
	GCCAGTATGG	GGGCGCAGGC	TGGCTTCTG	ACGGGAGGA	CGAAGCGGG	CGAAGAGAGG	4260
70	CGGTGCCAAG	GACTTCAGGC	AGGGAGCCCT	CAGCTCCTTC	CGGGAACCTC	CCCGACCGGG	4320
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	ACTCTCGGCG	CTCTCTCATC	AAAGCAATCC	GCGAGGAGCT	CCTCGGCTC	TCCAGAAAC	4440
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75	GAGCAACTCT	CGGCGAGCCT	GCCCAAGGGA	GGGAGCAAGT	TGCAATTAG	AAGATGCCAT	4620
	ACGTGCTGTG	ACAGCTCATG	AGCCTTTCAC	TGGGCTGGCA	ATTGTCTGAA	CACCTGGGTT	4680
	CAGTTGAAT	ATATGTATT	TGCGCAAAAG	CCAGCAGCAC	TTCAAAAAA	CAAAACACAA	4740
	ACCTAAGCTA	ACAAAATGAC	TGCAATCGTC	CTTTTTTAA	AGGTAGAGAT	TAAACTGTAT	4800
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	AGACTGTTTG	GGAACTTTAA	AAAGCTACTA	GTGAGAAACC	AAATGATAGG	TTGTAGAGCG	5040
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	CAAGGGCCCT	TCACCTTCAT	GTCTGAAATG	GAACCTTGGC	TTTTTCACTG	GAAGAAATATG	5160
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5264

Seq ID NO: 146 DNA Sequence

Nucleic Acid Accession #: AK096568.1

Coding sequence: 63..797

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GGGACCGGGG AGAGGCTTGG TGGGGGCGGG AGGCTGCGCG CTTCCCGGAG TGGGAGGAGT 240  
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CCCTTTTCCC CTCTTTTCCC TTTCAAGAGC AGGGCTGGG CAAGGCCAAG AACCATGCAG 960  
AAGCCTTCTC GGTGAGGTGG CCGTGAAGCC GAAGCAGGGA GGTGGGTGAG ACAGAGGGTG 1020  
GGGAGGATAG TGTCTGGCTC ATTCAGGCTT GGAATGTGGA TCCAGCTTTC CTTCTCTTA 1080  
CTGTACAGT GAGATGCTCA GTGGGCTCAA TCTTCACTA CAGTCCCGG TACCTGAGGA 1140  
ACCAGTGTAG GTGTGAGAAA TACTCTTAGA GCTTCAAGT CTCCAGTCC AGAAACAGTC 1200  
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Seq ID NO: 147 DNA Sequence

Nucleic Acid Accession #: NM\_021077.1

Coding sequence: 37..402

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Seq ID NO: 148 DNA Sequence

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Coding sequence: 15..1313

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ACCAGGCTGA GCTGCGAGAG CTGCGGCTGC GGCTOGATCA ACTCACCGCC AACAGCGCCC 420  
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Seq ID NO: 149 DNA Sequence  
Nucleic Acid Accession #: L29126.1  
Coding sequence: 445..1845

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TCTGGTTTCA CTGAACACAT TGAAGATGTC AAAATGGCAT TTGACAGAGA TGGTGAAGAG 1440  
GCCGATATAT CTGCCAATGT CTATCCAGC ATAAACATCA TCACCTGAGC CTTTAAAGCT 1500  
TATTTAGAG ACTTACCATC CCTGTCTATC ACATATGATA CCTATTCCAA ATTTATAGAT 1560  
CGACCAAAAA TCTCCAATGC AGATGAGAGG CTGGAAGCGG TCCATGAAGT GCTGATGCTG 1620  
CTGCTCTCTG CCCACTATGA AACCTCCCGT TACCTAATGA TCCACTCAA AAAGTTTACT 1680  
ATGAATGAAA AAGACAATTT CATGAATGCA GAAATCTGG GGATCGTGTG TGGGCCCACT 1740  
CTGATGAGGC CCCCTGAGGA CAGACCCCTG ACCACCTGCT ATGATATGCG GTACCAAAAG 1800  
CTGATTTGTC AGATTTTAAAT AGAAAAACGAA GACGTTTAT TCTAATCCAT CAGGGAATG 1860  
AGCTGAATGG CCCAGACCA TCAAGTTGAC ACAGCTAAGG ATAAAAATT TCTTACCATT 1920  
TGATTGTTT TCCAGCAAG TGCTAGAATT TGCTGGAAGT CAGAGGATCG CTGAGTGGGG 1980



5 TACTGTGCT CATAGACATG CGCCACCTCC ACGTGAGAAC AAGGGTGAAG GTGAGGGAAG 2040  
CCCTCAGGT TGGGTCTTTT GCTGTGCTCT CTATGTATGT CTGGTTTGCT GGAAGAGTGA 2100  
TTAATACATC TTTAATTTAT TAAAAACAA TGTAGACCTT TAAACTTCAG TCTATTGGG 2160  
AATAAAGGG AACTTAATTC ATACAGGTAC TGTAGACAGT TATACATTTT CCACTTACAA 2220  
AAGAAGACA ATTCTGTAA ATGAAACGTG TATCGTAAAA TGTAAATTTA TTTACCCACG 2280  
AGAATGTTGT TATTTTAGCA ATAGAACTCA ATGCAGATGC ATTGGTTATT ACCCTGTGTA 2340  
CCTGTGCTCT CATTTTGTCT TGACACCTCG AAAAGCTGGA CCACAATGC AGTATTATCA 2400  
TTGACATACC TCTGTCTCTC TCAGTGCTTT TTAATGTAAT TTCACCGGAA TTC 2453

10 Seq ID NO: 150 DNA Sequence  
Nucleic Acid Accession #: XM\_113553.1  
Coding sequence: 25..939

1 11 21 31 41 51  
15 CCCAGGAACC CCCAGGAGGC CAGCATGAAG CGAGCTCACC CCGAGTACAG CTCTCGGAC 60  
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AGTTCCGGCTC TAGGTTCCAT GTCCCAACT ACATCTTCCC AGATTTTGCC CAGAAAAAGA 180  
CGGAGAGGAA TAATTGAGAA GCGCGGACGA GACCGGATCA ATAACAGTTT GTCTGAGCTG 240  
20 AGAAGGCTGG TACCCAGTGC TTTTGAGAA CAGGGATCTG CTAAGCTAGA AAAAGCCGAG 300  
ATCCTGCGAG TGACCGTGA TCACTGAAA ATGCTGCATA CGGCAGGAGG GAAAGGTTAC 360  
TTTGACGGGC ACGCCCTTGC TATGGACTAT CGGAGTTTGG GATTTCGGGA ATGCTGGCA 420  
GAAGTTGGGC GTTATCTGAG CATCATTGAA GGACTAGATG CCTCTGACCC GCTTCGAGTT 480  
CGACTGGTTT CGCATCTCAA CAACTACGCT TCCAGCGGG AAGCCGCGAG CGGCGCCAC 540  
GCGGGCTGCT GACACATTCC CTGGGGGACC GTCTTGGGAC ATCACCAGCA CATCGGCAC 600  
25 CGCTGTTTGC TGCCCCAGAA CGGCCAGGG AACCGGGCA CCACGGCTCC ACCCAAGGAA 660  
CCGCACACC AGGCGAGGCT GGGCTCGGCA CATCCGAGG CGCTGTCTT GCGAGCGCCC 720  
CCTAGCGGCA GCCTCGGACC GGTGCTCCCT GTGTCACTT CCGCTCCAA ACTGTGCGCG 780  
CCTGCTCTCT CCTCAGTGGC CTCCCTGTGG GCCTTCCCT TCTCTTGG CTCTTCCAC 840  
TTACTGTCTC CCAATGCACT GAGCCCTTCA GCACCCACGC AGGCTGCAAA CCTTGGCAAG 900  
30 CCTATAGAC CTTGGGGGAC GGAGATCGGA GCTTTTAAA GAACTGATGT AGAATGAGG 960  
AGGGGAAGT TTAATAATCC AGCTGGGCTG GACTGTGTCC AACATCACTT TAAAGTCGT 1020  
AGTAAAGTA AAAAGGAAAA AGGTACACTT TCAGATAATT TTTTITTTAA AGACTAAAG 1080  
TTTGTTGGTT TACTTTTATC TTTTITTAAT TTTTITTCAT CATGTCACTG ATTAGCAGTT 1140  
35 TTTAAAACT AGTGTGTAATA TTTTITTCAA GACATTAAT TGAAATAGTG AGTATAAGCC 1200  
AACACTTTGT GATAGGTTTG TACTGTGCTT AATTACTTGT GTAAACAGA ATGATTCCGT 1260  
TTTTGCTCTA AAATTTGGGG AATCTTAACA TTTAGTATT TGGTCTGTT TTTCTCCTG 1320  
TATAGTTATG GTCTGTTTTT AGAATTAATT TTCCAAACCA CTATGCTTAA TGTTAACATG 1380  
ATTCTGTTTG TTAATATTTT GACAGATTAA GGTGTGTAT AAATAATATT CTTTGGGGG 1440  
40 GAGGGGAATC ATATTGAATT TTATATTCT GAGCAAGCG TTGACAAATC AGATGATCAG 1500  
CTTTATCCAA GAAAGGAGAC TAGTAAATG TCTGCTCTCT ATAGCAGAAA GGTGAATGTA 1560  
CAAACCTGTG GTGGCCCTGA ATCCATCTGA CCAGCTGCTG GTATCTGCCA GGACTGGCAG 1620  
TCTGTATTTA GTTAGGAGAG AGCCGCTGAT AGGTAGGTC TCATTTGGAG TGTGTTGGA 1680  
AAGAAAGTCT AAGGTAATTG AATAGAATAC GCCTGCATT ACCAGCCCCA GCAACACAAA 1740  
45 GAATTTTAA TCACACCGAT CTCAAATCA CAAATGTTAA CATGGATAAG TGATCATGGT 1800  
GTGCGAGTGG TCAATTGAGT AGTACAGTGG AAATGTTAA ATGCATAACC TAATTTTCT 1860  
GGGACTGCCA TATTTCTTTT TAACGGAAA TTTTATGTG AGTTTCTCTT TGGTGCTATG 1920  
GAACTGTGTT TGCCAAAGGA TTTAAAGGG CTTTCTGCTC TCCTTCTCTT TGATTTATT 1980  
AATTGTATTG GGGCTATAAA ATATCATTTT TCAGGTTTAT TCTTTTAGCA GGTGTAGTTA 2040  
50 AACGACCTCC ACTGAACCTG GTTGACCTC TGTGTACTG ATGTGTTGTG ACTAAATAAA 2100  
AAA 2103

Seq ID NO: 151 DNA Sequence  
Nucleic Acid Accession #: NM\_001936.2  
Coding sequence: 178..2589

55 1 11 21 31 41 51  
AGCAAACTG TCTTGTCTAC CCACCTCC TCCTTACCTT ACCGCTTGA CTCTGGTGGC 60  
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60 TCCCAACTCG CCGTCAGACC CCACCTGCC CGGTGGTGGG AAGGCGCTGG ACAGACCATG 180  
ACCAACGCA AGGAGCCAAG CGCTTCGGGG AAATCCGTGC AGCAGCAGGA ACAGGAGCTG 240  
TTGGGGAGTA ACCCTCGCA GAGGAATTGG AAAGGAATAG CAATTGCACT GCTTGTCTAT 300  
CTGTCATCTC GCTCTTGTAT CCTCACTCG GTCATATCTC TGACACCAGC GGAAGATAAT 360  
AGTCTGTCTC AAAAGAAGAA GGTCACTGTA GAAGATCTCT TCAGTGAAGA CTTCAAAAT 420  
65 CATGACCCCG AGGCTAAGTG GATAAGTAT ACAGAAATCA TCTACAGAGA ACAGAAAGGA 480  
ACAGTGAGAC TGTGGAATGT TGAAACAAAT ACTTCTACTG TCTTAATAGA AGGCAAAAA 540  
ATTGAATCAT TAAGAGCCAT CAGATATGAA ATATCTCCAG ATAGAGAGTA TGCACTTTTT 600  
TCATACAATG TGGAAACCAT ATATCAACAC TCGTATCTG GATATTACGT CCTGAGCAAA 660  
ATTCTCATG GGGATCTCA AAGTCTGGAC CCACCAAGAG TCAGCAATGC AAAGCTTCAG 720  
70 TATGCAAGAT GGGGCCCTAA AGGCCAAGC CTGATATTTA TTTTGAAGAA CAATATCTAC 780  
TACTGTGCAC ATGTCCGGAA ACAGGCCATC CGTGTGGTCT CCACCTGGCA GGAAGGTGTG 840  
ATTTACAATG GCCTCAGTGA CTGGCTGTAT GAAGAGGAGA TTTTGAAGAC ACACATCGCA 900  
CACTGGTGGT CTCCAGTGG CAGGAGCTC GCTACGCGC CCATCAATGA TTCCCTGTG 960  
CCATCATGG AGCTCCCAAC TTACACCGGC TCCATCTACC CCACCTGAA GCCCTACCAC 1020  
75 TATCCCAAGG CTGGAAGTGA GAACCCAGC ATTTCCCTAC AGTTTATTGG CTTAAATGGA 1080  
CCACCCCATG ATCTGGAGAT GATGCGGCT GATGATCCAC GGATGAGGGA GTACTACATC 1140  
ACCATGTTGA AGTGGGCCAC CAGCACCAAG GTCCGCTGAA CCTGGCTGAA CCGGGCGCAG 1200  
AAGTGTCCA TCCTCACCT CTGGAGGCGC ACCACGGGG TCTGCAGAA GAAACACGAG 1260  
GATGAAGTGT AGGCTGGCT CCACAGACAG AATGAAGAAC CTGTGTTCTC CAAGGATGGC 1320  
80 CGAAGTTTT TCTTCTCAG AGCCATCCCC CAGGAGGAC GAGGGAATTT CTATCACATC 1380  
ACGGTGTCTC GTGCCAGCC CAACAGCAGC AACGACAACA TCCAGTCCAT CACCTCCGGG 1440  
GACTGGGACG TGACCAAGAT CCTAGCCTAC GATGAGAAG GGAATAAGAT CTACTTCTG 1500  
AGCACGGAGG ACCTGCCTCG GAGACGACAA CTCTACAGTG CCAACACGGT GGGCACTTC 1560  
AACAGGCACT GCCTCTCCTG TGACCTGGTT GAGAACTGCA CTTACTTCAG CGCTTCTTC 1620  
AGCCATAGCA TGGACTTCTT CCTGCTCAAG TGCGAAGGTC CTGGTGTTC TATGGTGAGC 1680



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GTGCACAACA CAACAGATAA GAAAAAATG TTGACCTAG AAACAAATGA ACATGTCAAG 1740  
AAGGCCATAA ATGACCGACA GATGCTAAA GTGGAATACA GGGACATTGA GATTGATGAT 1800  
TACAACTCTG CCATCCAGAT ACTGAAGCCA GCAACCTTCA CCGACACCAC CCACCTACCTT 1860  
CTGCTCCTCG TGGTGGATGG CACCCCGGSC AGCCAGAGTG TAGCTGAGAA GTTCGAGGTG 1920  
AGCTGGGAGA CGGTGATGGT GAGCAGCCAC GGCGCGGTGG TGGTAAAGTG TGACGGCGGT 1980  
GGCAGCGGCT TCCAAGGGAC CAAGCTCCTG CACGAAGTGA GCGCGCGGCT GGGCTTGCTG 2040  
GAGGAGAAAG ACCAGATGGA GCGCGTGGG ACGATGCTGA AGGAGCAGTA CATTGACAGG 2100  
ACGCGCGTGG CCGTGTTTGG GAAGGATTAC GGTGGCTACC TGAGCACCTA CATCTCCCA 2160  
GCAAGGGGAG AAAATCAAGG CCAGACATTG ACCTGCGGCT CTGCTCTCTC TCCAATAACA 2220  
GACTTCAAACT TCTATGCTCT TGCGTTTCC GAGAGGTAAT TGGGCTCTCA TGGACTTGAC 2280  
AACAGAGCAT ACCAGATGAC CAAGGTAGCC CATCGAGTCT CCGCGCTGGA AGAACAGCAG 2340  
TTCTGATACA TTCTATCCAC TGCGATGAA AAAATTCATT TCCAGCACAC AGCAGAACTC 2400  
ATTACACAAC TAATTAGGGG AAAGGCTAAT TACAGCTTAC AGATTTACCC GGACGAAAGC 2460  
CATTACTTTA CCAGCTCCAG CCTCAAAACG CATCTGTACC GGTCCATCAT CAATCTCTC 2520  
GTGGAATGCT TCAGGATCCA GGACAAACTG CCGACAGTCA CAGCGAAAGA GGACGAGGAG 2580  
GAGGACTAAG CTCAGGTGCG TCTAAGCACA AAGTGGCTC TTTCTACAC CAGATGCAAC 2640  
CGAGGGAATT CCGTCCCTCT CCTCTTCCCT CGAGGGGGCG GGGCGGGGCG GGGCGGGT 2700  
TTCCATAGCA TGTGTGCTC GGATGCGGAA GCGAGTTTGG CTTGGGAAAC AAGCTCCTTC 2760  
CCCGGGGTCA TCACTCAGG CCTCCATGGC ACCAGGGACA ACGCTGCTCC CGCAGCAGCG 2820  
CCTCTCTCCG GCGCCGAGA GACCGGACG CCAAGGCCCC TCCCCAAGG AACAGAGCAA 2880  
AGGATGGTGG CCGCAGGCC CACGCGAGCC CACAGGACAC CGGCCCCTAG ATTCCAGCCA 2940  
CCAAGGGAA GCATGAGACC CGCCACACT AGCCTCTGTG TTCCGTTAG GGACATCACA 3000  
CCTGTCTCA CGTCGAGTG CCATGGACGC AGCAGTTACA GCACCATTGT TTTAGCAGTG 3060  
CGTGTTCATA TATGGGCTTG CTACTTCTG TAATGAGGAC GTTCAACATG GTGAGGGGCT 3120  
ACAGAAACAC GCTTTTCTGT ACAGAGTCTT ACTGTAGCTA GCCTAATGGT TAACCTGATA 3180  
GAATTAACCT GTATTTTCTT ATGGTTTAA CCTGATGCTC CACTGTCTCC GTCATGGGGT 3240  
TGTTTTGTCT TTTGGGGTTG GGCCTTGTCT CCTTCTCTT TCTCCAGTCC ACGTGTAGAC 3300  
TTTGGGCTTG ATGAAGAAGC AGATCGGAAG TAACTGCTCC CTCTCAAGG TGTCTTCAG 3360  
ACGCTCTGGG GACGTTCTTA AACACTGAGG GGAAGACAG CCAATAGCAC CCATTAAGAG 3420  
AAATACCTAA ATAAACCTC TCTCCACTC AGCTATGCTA GGGCTTGGCT GTAGGTGTGC 3480  
ACTGTCTATT TACATCGTC CTTACAACA TCCTTGCTCT CTTGGTACC GTATCAAGCT 3540  
CTTCCCATG ACATTGGTT 3560

35 Seq ID NO: 152 DNA Sequence  
Nucleic Acid Accession #: XM\_087461.1  
Coding sequence: 236..1138

1 11 21 31 41 51

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CCGCGCGCGG GGGCGGGGGG GAACCCCAAA CGCAACCGGG TCTGGAGGGA TCCCCGCGCC 60  
GAGCCAGCCG CCGTACACCG CTCGCGCGCG CCGCTCGGGG CTTGGCAGGC GCCCGCGCG 120  
CCCGCACTCG GCCCGGCGCG CGGCTCCCGC GGTCCCAACG TGAGCTCGCC GGCCCGTCCG 180  
CGGCTCGGCA TGCAACCGCC GCGCGCTCG CGCGCGTAGG CGCCCGCGCG AGGCCATGCT 240  
GCCCTGCTCT GCGCGGCTCC TGGCGCGCGC CTGCGCGCTG CCGCCCGTCC GCGCGGGGCG 300  
CGCGGACCGG CCGGCGCTCC TCGGGGTGCC CTCCAATGCT TCAGTCAACG CGTCTCTCCG 360  
GGCGAGCCCA TCGCCCGCGG GCTGCTGGCC TCGCGCGGCC CCGGCGCCCG CGAGCGCGCG 420  
GGCCCGGAGG AGCGCGCGCG GCGCGCGCGC CCGTGCAAC ATCAGCGTGC AGCGCGCAGT 480  
GCTGAGCTCG CTGCTGTGTC GCTGGGGCGG CCGCGGGGCG TTCCAGTGGC ACCTACTGCT 540  
CTTCTCCACC AACCGCACG GCGCGGCTTT CTTCGCGCGC GCCTTCCACC GCGTGGGGCC 600  
GCGCGTCTCT ATCGAGCACG TGGGGCTGGC GCGGGGCGCG GCGCAGCAGG ACCTGCGGCT 660  
CTGCGTGGCG TCGCGCTGGG TCGCGGTGCG CCGCACCGCG CGCTCCCGCG CCGCGCGCGC 720  
CCCAGCGGCC GCGCGGCCCA CCGCGCGGGC GCGCACCGCG CTGCCAGCCT ACCCGCGGCG 780  
CGAGCGCGCC GGGCGGCTGT GGTGCGAGGG CGAGCGCGCT CATTTCTGCT GCCTAGACTT 840  
CAGCGTGGAG GAGCTGCAGG GCGAGCGGGG CTGGCGGCTG AACCGTAAGC CCATTGAGTC 900  
CAGCGTGGTG GCGTCTTCA TGACCTGGT CATCGTGGT TGGAGCGTGG CCGGCTCAT 960  
CTGGCGGGTG CCGATCATCG CCGGCTTCT GCGCAACGCG ATGGAACAGC GCGGAGCCAC 1020  
CGCCAGCAGC ACCGCGGCCA CCGCGCGCGC AGTGGCGCA GGGACCAACG CAGCGCGCGC 1080  
CGCGCGCGCG GCTGCGCGCG CCGCGCGCGC CGTCACTCG GGGGTGGCGA CCAAGTGACC 1140  
ACGCTCGCTC CTCCCTGTGT CCGTCTGTGT TCGCGCGCGG CGGGTGGCTT TCCCGCGGGA 1200  
GACTCGGCGG GTGTGCTTCG TGCTGTAGTT ATCGTTAGTT CCTCTTCCCG AGATGGGGCC 1260  
GCCGAGAGAC CCGAGCGGCT TTGAAAAGCA AGGTTTGTGC TGCGCTTCCA GTTCCGAAAA 1320  
GCAGATGTTT AAGCCCTTGG ACTGAGGGTG GGATCGCAGC TCGAAGACG GAGAGGAGG 1380  
AAATGGGGCC CTTTCCCTC TATTGATCC CCGTGGCGGA CTCTTCCCC GCACCCACGT 1440  
GCCCTAGATT CATGGCAGAA AATGACCAAA TCCTGTGTAT TTGTTTATA TATTAAATA 1500  
CTGTTTAAAG TGAAGTTTT AGTAAAAAAA ATACAAAACA AAAAGATTAA ATTGCTATTG 1560  
CTGTAGTAAG AGAAGCTCTT TGTATCTGAA CATAGTTGTA TTTGAAATTT GTGGTTTTTT 1620  
AATTTATTTA AAATTGGGGG GAGGGCATGG GAAGGATTTA ACACCGATAT ATTGTTACCG 1680  
GTGAAAATGA ACTTTATGAA CCTTTTCCAA GTTGATCTAT CCAGTGACGT GGCCTGGTGG 1740  
GCGTTTCTC TTGTACTTAT GTGGTTTTTT GGCTTTTAAAT ACAGACATTT TCCTCC 1796

75 Seq ID NO: 153 DNA Sequence  
Nucleic Acid Accession #: NM\_012261.1  
Coding sequence: 1-843

1 11 21 31 41 51

75  
80

ATGGATCTCC AAGGAAGAGG GGTCCCCAGC ATCGACAGAC TTCGAGTTCT CCTGATGTTG 60  
TTCCATACAA TGGCTCAAAAT CATGGCAGAA CAAGAAGTGG AAAATCTCTC AGGCCTTTCC 120  
ACTAACCTCG AAAAGATAT ATTGTGGTG CGGAAAATG GGACGAGCTG TCTCATGGCA 180  
GAGTTTGAG CCAATTTAT TGTACCTTAT GATGTGTGGG CCAGCAACTA CGTAGACTG 240  
ATCAGAGAAC AGGCCGATAT CGCATTGACC CGGGGAGCTG AGGTGAAGGG CCGCTGTGGC 300  
CACAGCCAGT CGGAGGTGCA AGTGTCTGG GTGGATGCGG CATATGCACT CAAAATGCTC 360  
TTGTAAAGG AAAGCCACAA CATGTCCAAG GCACCTGAGG GCAGTTGGAG GCTGAGCAAA 420  
GTGCAAGTTG TCTACCACTC CTGGAGAAA ACCCACTTCA AAGACGAGT CAGTGTGGG 480  
AAGCACACAG CCAACTGCA CCACTCTCT CCGTTGGTCA CCGCGCTGG GAAGTCCCTAT 540  
GAGTGTCAAG CTCAACAAAC CATTTCACTG GCCTCTAGTG ATCCGACAGAA GACGGTCAAC 600

5 ATGATCCTGT CTGCGGTCCA CATCAACCT TTTGACATTA TCTCAGATT TGTCTTCAGT 660  
GAAGAGCATA AATGCCAGT GGATGAGCGG GAGCAACTGG AAGAAACCTT GCCCTGATT 720  
TTGGGGCTCA TCTTGGGCTT CGTCATCATG GTAACACTCG CGATTACCA CGTCCACCAC 780  
AAAATGACTG CCAACCAAGT GCAGATCCCT CGGACAGAT CCGAGTATAA GCACATGGGC 840  
TAG 843

Seq ID NO: 154 DNA Sequence  
Nucleic Acid Accession #: NM\_144586  
Coding sequence: 261..686

10 1 11 21 31 41 51  
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GCACGCGGGA GCCCGGCGCG GGGGATGCA GGCTCCGCGA GCGGCACCTG CGGCTCTCT 120  
AAGCTAGAC CGTGTCTCC GCGGACAGCG CGCGGGCCCG AGCAGCCTCG GCAGCCACAG 180  
15 CCGCTGACG CGGGGACAGC TCGCTGCTG TCGCTCTCT TGTGCGCTT GCGCTCTCC 240  
GCCCGCGGA CTCGGGAGA ATGTGGTCC TAGGCATCG GGCACCTTT TCGGATTGT 300  
TCTTGTCTC AGGCTTTGCG CTGCAATCC AGTGCTACCA GTGTGAAGAA TTCCAGCTGA 360  
ACAACTGACT CTCTCCGCC GAGTTCATT TGAATTGCAC GGTGAACGTT CAAGACATGT 420  
GTCAGAAAGA AGTGTGGAG CAAAGTCCCG GGATCATGTA CCGCAAGTCC TGTGCATCAT 480  
20 CAGCGGCTGT TCTCATCGCC TCTCGCGGT ACCAGTCTCT CTGCTCCCCA GGGAAACTGA 540  
ACTCAGTTTG CATCAGTGC TGCAACACC CTCTTTGTA CCGGCCAAGG CCAAGAAAA 600  
GGGCAAGTTC TCGCTCGGCC CTCAGGCCAG GGCTCGCAC CACCATCTGT TTCTCAAT 660  
TAGCCCTCTT CTGCGCACAC TGCTGAAGT GAAGGAGATG CACCCCTCT CTGCTATTGT 720  
CTTCAGGCC TCGCCCCCAA CCCCCCACT CCTGAGTGA GTTTCTCTG GGTGCTCTT 780  
25 TATCTGGGT AGGAGCGGG AGTCCGTGT CTCTTTTGT CCGTGCATAA TAATGAAGA 840  
GCTCGGTAAA GCATTCTGAA TAAATTCAG CTGACTGAAT TTTCAGTATG TACTTGAAG 900  
AAGGAGTGG AGTGAAGATT CACCCCAAA AAAAAAAA AAAAAA 946

30 Seq ID NO: 155 DNA Sequence  
Nucleic Acid Accession #: NM\_004694  
Coding sequence: 166..1737

1 11 21 31 41 51  
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35 AGTGCACTAG TGTGATCACT TCTTACTGCC GCCTCAAGCT TCCAGCCTCA ACTCAAGCAA 120  
TCTCCACACC TCAGCCACCC AAGTGGCTGG GACTACAGAT TAAGAATGAC CCAAAATAA 180  
TTAAAGCTTT GTTCCAAGAC CAATGTGTAT ACTGAAGTGC CTGATGAGAG ATGGGGCTGG 240  
CGGTAAGCTG TTTCATTTT CTTCGTTGAA GTCTTCACCT ACGGCATCAT CAAGACATTT 300  
40 GGTGTCTCT TTAATGACTT AATGGACAGT TTTAATGAAT CCAATAGCAG GATCTCATGG 360  
ATAATCTCAA TCTGTGTGTT TGTCTTAACT TTTTCACTC CCGTCCGAC AGTCCGAGC 420  
AATCGTTTG GACACCGTCT GGTAGTATG TTGGGGGGGC TACTTGTGAG CACCGGATG 480  
TGCGCCGCT CTCTTCAACA AGAGTTTCT CATATGACG TCGCCATCGG CATCATCTCT 540  
GGTCTGGAT ACTGCTTAG TTTTCTCCA ACTGTAACA TCCTATCACA ATATTTTGGC 600  
45 AAAAGACGT CCATAGTCAC TGCAGTTGCT TCACAGGAG AATGTTTCCG TGTGTTTGGT 660  
TTCCGACACC CAATCATGGC TCTGAAGGAG CGCATTGGCT GSAGATACAG CTCCTCTCTC 720  
GTGGGCTTAC TACAGTTAAA CATTTGCATC TTCCGAGCAC TGCTCAGACC CATCATATC 780  
AGAGGACGAG CGTCAACGAA AATAGTCATC CAGGAAAAATC GGAAGAGAGC GCAGTATATG 840  
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50 ACCTCACCTA AAAATGTGCC TACTCACACT AACCTGGAAC TGGAGCCGAA GGCAGCATG 960  
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TTCTCCATTT TGAAGAGAA AAGTTTATT TGTATTGAT TATTGGTCT CTTTGCAACA 1080  
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55 GGAGCTGGTT TGTCTCTCAA CAGGAGGCC ATTGTAAGA TTTACATTGA GCTCATCTGC 1260  
GTCTCTTAT TGACTGTGTC TCTGTTTGGC TTTACTTTTG CTACTGAAT CTGGGCTCTA 1320  
ATGTCATGCA GCATATTTT TGGGTTATG GTTGAACAA TAGGAGGACT CACATTCAC 1380  
TGCTTGCTGA AGATGATGTC GTGGGATTG CAGAAGATGT CTCTGCGAG TGGGCTCTAC 1440  
ATCTTCATTC AGAGCATAGC AGGACTGGCT GGAACCGCCC TTGCAGGTTT GTTGGTGGAC 1500  
60 CAAAGTAAGA TCTACAGCAG GGCCTTCTAC TCCTGCGCAG CTGGCATGGC CCGGCTGCT 1560  
GTGTCCCTCG CCGTGGTGAG ACGTGTAAAG ATGGGACTGT GCCAGCGTCA TCACTCAGGT 1620  
GAAACAAAGG TAGTGAGCCA TCGTGGGAAG ACTTACAGG ACATACCTGA AGACTTCTG 1680  
GAAATGGATC TTGCAAAAAA TGAGCACAGA GTTCACGTGC AATGGAGCC GGTATGACAC 1740  
ACTTCTTAC AACACAGACC ACTGTGTTGG CTGGAGAGGG ATGGGGTGGG CCAACCGGG 1800  
65 ACACAGGAGG GCAGAGGAGC TAACCCCTCT ACTCCACTT CAAAACTACA TTTTAAAGGG 1860  
AATGTGATG TGAAGAGCAC TACCAACATC GCTTTTGTGT TGTTTTGTGT TGTTTTAAAG 1920  
TTTTTTTTT TGTGTTTGT TAAAGCAAAA ACAAATAACA ACCAAGCACT CTTCATATA 1980  
TAAATCTGGC TGTATTGAGT AGCAATACAA GAGATATGTA GAAAGACTCT TTGTTTACA 2040  
TTCCGATATT AAAATAGTGA CATGAATCG CAAAGTGGT TTAAGAGC TCAAGTGGGA 2100  
70 TAAATGATT TCTTTTCTT TTTTCTTCT TCCTATGGTC TTGTCTGAAT AAACACTCT 2160  
CCTGAATAAA ACAACATCCA ACCCAGGTCA TTGAATGAA ATTGGCCAGT C. 2212

Seq ID NO: 156 DNA Sequence  
Nucleic Acid Accession #: NM\_004833.1  
Coding sequence: 246..1277

75 1 11 21 31 41 51  
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80 AGTCACCTAG GTTATTGGG CATGCTCTCC TGAGTCTCT GCTAGTTAAG CTCTCTGAAA 180  
AGAAGGTGGC AGACCGGTT TCGTATCGC CCGAGGATC AGGAGGCTGA TCCCAAGTT 240  
GTCAGATGGA GAGTAAATAC AAGGAGATAC TCTTGCTAAC AGGCCTGGAT AACATCACTG 300  
ATGAGGAATC GGATAGGTTT AAGTTCTTTC TTTAGACGA GTTTAATATT GCCACAGGCA 360  
AACTCATATC TGCAACACGA ATACAAGTAG CTACCTTGAT GATTCAAAAT GACTGGGGCG 420  
TGTCTGCAAT GATGAAGACC ATTCGTATT TGCAGAGTT GAATTATATG CTTTGGGCAA 480

5 AACGCTTCA GGAGGAGAAG GAGAAAGTTG ATAAGCAATA CAAATCGTA ACAAAACCAA 540  
AGCCACTAAG TCAAGCTGAA ATGAGTCTCT CTGCTCTGCG AGCCATCAGA AATCATGTCG 600  
CAAAGCAACG TGCTGCACCA AAGTCTCTCT CTCATGTTAA GCCTGAACAG AACACAGATGG 660  
TGGCCCAACA GGAATCTATC AGAAGAGGGT TTCAGAAAGC GTGTTTGCCA GTTATGGTAC 720  
TGAAAGCAAA GAAGCCCTTC ACGTTTGAGA CCAAGAAAGG CAAGCAGGAG ATGTTTCATG 780  
CTACAGTGGC TACAGAAAGG GAATCTCTCT TTGTAAAAAT TTTTAAATACA CTGCTGAAG 840  
ATAAATTCAT TCCAAAGAGA ATAATTATA TAGCAAGATA TTATCGGCAC AGTGGTTTCT 900  
TAGAGGTAAA TAGCCCTCTA CGTGTGTAG ATGCTGAATC TGACCAAAAG GTTATGTCC 960  
CGCTGAACAT TATCAGAAA GCTGTGTAAG CCCCAGAT CAACACGCTT CAAACTCAGC 1020  
10 CCCTTGAAC AATGTGAAT GGTGTGTTG TAGTCCAGAA GGTAAACAGAA AAGAAGAAA 1080  
ACATATTATT TGACCTAAGT GACAACACTG GAAAAATGGA AGTACTGGGG GTTAGAAAGC 1140  
AGGACACAA GAAATGTAAG GAAGGAGATA AGGTTGAGT TACATTCTTC ACACCTGTCAA 1200  
AAAAAGAGA AAAACTACAG CTGACATCTG GAGTTCATAG CACCATAAAG GTTATTAAAG 1260  
15 CCAAAAAAAA AACATAGAGA AGTAAAAAGG ACCAATTCAA GCCAAGCTGT CTAAGCAGCA 1320  
TTTAATTGAA GAATATGTGA TACAGCTCT TCAATCAGAT TGTAAGTTAC CTGAAGAGCTG 1380  
CAGTTACAG GCTCCTCTCT CCACCAAAAT AGGATAGAT AATTGCTGGA TAAACAAAT 1440  
CAGAAATATC ACAGATGATC ACAATAAACA TCTGTTCTC ATTCC 1485

20 Seq ID NO: 157 DNA Sequence  
Nucleic Acid Accession #: NM\_005409.3  
Coding sequence: 94..378

1 11 21 31 41 51  
TTCTTTTCAT GTTCAGCATT TCTACTCCTT CCAAGAAGAG CAGCAAGCT GAAGTAGCAG 60  
25 CAACAGCACC AGCAGCAACA GCNAAAAACA AACATGAGTG TGAAGGGCAT GGCTATAGCC 120  
TTGGCTGTGA TATTGTGTGC TACAGTTGTT CAAGGCTTCC CCATGTTCAA AAGAGGAGCG 180  
TGCTTTTGA TAGGCCCTGG GGTAAAAGCA GTGAAAGTGG CAGATATTGA GAAAGCCTCC 240  
ATAATGTACC CAAGTAACAA CTGTGACAAA ATAGAAGTGA TTATTACCTT GAAAGAAAT 300  
30 AAAGAGCAAC GATGCCATAA TCCCAATCG AAGCAAGCAA GGCTTATAAT CAAAAAGTT 360  
GAAAGAAAG ATTTTTAAAA ATATCAAAAC ATATGAAGTC CTGGAAAAAG GCATCTGAAA 420  
AACTAGAAC AAGTTTAACT GTGACTACTG AAATGACAG AATTCTACAG TAGGAAACTG 480  
AGACTTTCT ATGTTTGTGT GACTTTCAAC TTTGTACAG TTATGTGAAG GATGAAAGTT 540  
GGGTGAAAG ACCAAAAACA GAAATACAGT CTTCTGAAT GAATGACAA CAGAATCCA 600  
35 CTGCCCAAG GAGTCCAGCA ATTAATGGA TTTCTAGGAA AAGCTACCTT AAGAAGGCT 660  
GGTTACCATC GGAGTTTACA AAGTGCTTTC ACGTTCTTAC TTGTGTATT ATACATTCT 720  
GCATTTCTAG GCTAGAGAAC CTCTAGATT TGATGCTTAC AACTATCTG TTGTGACTAT 780  
GAGAACATTT CTGTCTCTAG AAGTTATCTG TCTGTATTGA TCTTTATGCT ATATTACTAT 840  
CTGTGGTTAC AGTGGAGACA TTGACATTAT TACTGGAGTC AAGCCCTTAT AAGTCAAAAG 900  
40 CATCTATGTG TCGTAAAGCA TTCTCAAAAC ATTTTTCAT GCNAAATCAC ACTCTTTCC 960  
CCAAATATCA TGATGACAT CAATATGTAG GAAACATTC TTATGCATCA TTTGGTTTGT 1020  
TTTATAACCA ATTCATATAA TGTAATTCAT AAAATGTACT ATGAAAAAAA TTATACGCTA 1080  
TGGGATAGTG GCAACAGTGC ACATATTTC TAACCAAAAT AGCAGCACCG GTCTTAATTT 1140  
GATGTTTTCT AACTTTTATT CATTGAGATG TTTTGAAGCA ATTAGGATAT GTGTGTTTAC 1200  
45 TGTACTTTT GTTTGTATCC GTTTGTATAA ATGATAGCAA TATCTTGGAC ACATTGAAA 1260  
TACAAATGT TTTGTCTAC CAAAGAAAAA TGTGAAAAA TAAGCAAAAT TATACCTAGC 1320  
AATCCTTTT ACTTTTGTG ATCTGTCTC TTGAAAAAAT ACATAATCTA ATCAATTTCT 1380  
TTGTCTATGC CTATATACTG TAAATTTAG GTATACTCAA GACTAGTTTA AAGATCAAA 1440  
GTCAATTTT TCTCTATAA ACTACCACAA CCTTTCTTT TAAAAAAA AAA 1493

50 Seq ID NO: DNA Sequence 158  
Nucleic Acid Accession #: NM\_002562.1  
Coding sequence: 27..1814

1 11 21 31 41 51  
55 AAAACGAGG GAGGAGGCT GTCACCATGC CGGCTCTGCT CAGCTGCAGT GATGTTTTCC 60  
AGTATGAGAC GAACAAAGTC ACTCGGATCC AGAGCATGAA TTATGGCACC ATTAAGTGGT 120  
TCTTCAAGGT GATCATCTTT TCCTACGTTT GCTTTGCTCT GGTGAGTGAC AAGCTGTACC 180  
AGCGGAAAGA GCCTGTATC AGTCTGTGTC ACACCAAGGT GAAGGGGATA GCAGAGGTGA 240  
AAGAGAGAT CGTGAGAAAT GGAGTGAAGA AGTTGGTGCA CAGTGTCTTT GACACCGCAG 300  
60 ACTACACCTT CCCTTTGCAG GGGAACTCTT TCTTGTGAT GACAAACTTT CTCAAAACAG 360  
AAGGCCAAGA GCAGGGGTTG TGTCCGAGT ATCCCAACCG CAGGAGCCTC TGTCTCTCTG 420  
ACCGAGGTTG TAAAGAGGGA TGATGGACG CGCAGAGCAA AGGAATTCAG ACCGGAAGGT 480  
GTGTAGTGCA TGAAGGGAAC CAGAAGACCT GTGAAGTCTC TGCCGTGGTG CCCATCGAGG 540  
65 CAGTGGAAAG GGCCCCCGG CCTGCTCTCT TGAACAGTGC CGAAAACTC ACTGTGCTCA 600  
TCAAGAACAA TATGACTTTC CCGGCCACA ACTACACCAC GAGAAACATC CTGCCAGGTT 660  
GAGACATCTT CCGAGAAACA GGGGATAATT TTTAGATGT GGCAATTCAG GCGGAATAA 720  
TGGGCATTGA GATCTACTGG GACTGCAACC TAGACCGTTG GTTCCATCAC TGCCATCCCA 840  
70 AATACAGTTT CCGTGCCTTT GACGACAGA CCACCAAGCT GTCTTGTAC CCTGGCTACA 900  
ACTTCAGATA CGCCAAGTAC TACAAGGAAA ACAATGTTGA GAAACGGACT CTGATAAAG 960  
TCTTCGGAT CCGTTTGTAC ATCTGGTTT TTGGCACCGG AGGAAATTT GACATTATCC 1020  
AGCTGTTGT GTACATCGGC TCAACCTCT CTACTCTGG TCTGGCGCT GTGTTATCG 1080  
ACTTCTCAT GCACACTTAC TCCAGTAAT GCTGTGCTC CCATATTAT CCTGGTGCA 1140  
75 AGTGTCTGCA GCCCTGTGTG GTCAACGAAT ACTACTACAG GAAGAAGTGC GAGTCCATTG 1200  
TGGAGCCAAA GCGGACATTA AAGTATGTG CTTTGTGGA TGAATCCCA ATTAGGATGG 1260  
TGAACCAACA GCTACTAGGG AGAAGTCTGC AAGATGTCAA GGGCCAAGAA GTCCCAAGAC 1320  
CTGCCATGGA CTTACAGAT TTGTCCAGGC TGCCCCCTGC CCTCCATGAC ACACCCCGGA 1380  
TTCTTGGA CAACAGAGGAG ATACAGCTGC TTAGAAAGGA GCGCACTCT AGATCCAGGG 1440  
80 ATAGCCCGT CTGTGCTCAG TGTGGAAGT GCCTCCATC TCAACTCCT GAGAGCCACA 1500  
GGTGCTGGA GAGCTGTGTC TGCCGAAAA AGCCGGGGG CTGCATCACC ACCTCAGAGC 1560  
TGTTCAGGAA GCTGGTCTG TCCAGACAG CTCTGAGTT CTTCTGCTC TACCAGGAGC 1620  
CCTTGTGGC GCTGGATGTG GATTCCACCA ACAGCGGGCT CGCGCACTGT GCCTACAGGT 1680  
GCTACGCGAC CTGGGCTTTC GGCTCCAGG ACATGGCTGA CTTTGCCATC CTGCCAGCT 1740  
GCTGCCGCTG GAGGATCCGG AAGAGTTTC CGAAGAGTGA AGGGCAGTAC AGTGGCTTCA 1800

AGAGTCCTTA CTGAAGCCAG GCACCGTGGC TCAOGTCTGT AATCCACCT TTT 1853

Seq ID NO: 159 DNA Sequence  
Nucleic Acid Accession #: NM\_001793.2  
Coding sequence: 54-2543

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1 11 21 31 41 51  
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CTCTGCAGCC ATGGGGCTCC CTCGTGGACC TCTCGGTCT CTCCTCTTC TCCAGGTTTG 120  
CTGGCTGCAG TCGCGGCTCT CCGAGCGGTG CCGGGGGTTC TTCAGGGAGG CTGAAGTGAC 180  
CTTGAGGCGG GGAGGGCGCG AGCAGGAGCC CGCGCAGGCG CTGGSGAAGG TATTATGCG 240  
CTGCCCTGGG CAAGAGCCAG CTCTGTTTAG CACTGATAAT GATGACTTCA CTGTGCGGAA 300  
TGGCGAGACA GTCCAGGAAA GAAGGTCACT GAAGGAAAGG AATCCATTGA AGATCTTCCC 360  
ATCCAAAGCT ATCTTAGGAA GACACAAGAG AGATTGGGTG GTTGCTCCAA TATCTGTCCC 420  
TGAAAATGGC AAGGGTCCCT TCCCCAGAG ACTGAATCAG CTCAGTCTA ATAAAGATAG 480  
AGACCCAAG ATTTTCTACA GCATCACGGG CCGGGGGGCA GACAGCCCC CTGAGGGTGT 540  
CTTCGTGTA GAGAAGGAGA CAGGCTGTT GTTGTGAAT AAGCCACTGG ACCGGAGGA 600  
GATTGCCAAG TATGAGCTCT TTGGCCAGC TGTGTGAGG AATGTTGCT CAGTGGAGGA 660  
CCCATGAAC ATCTCATCA TCGTGACCGA CAGAAATGAC CACAAGCCCA AGTTTACCCA 720  
GGACACCTTC CGAGGGAGTG TCTTAGAGGG AGTCTACCA GGTACTTCTG TGATGCAGGT 780  
GACAGCCAGG GATGAGGATG ATGCCATCTA CACCTACAAT GGGGTGGTTG CTTACTCCAT 840  
CCATAGCCAA GAACCAAGG ACCACACGA CCTCATGTTT ACCATTCAAC GGAGCACAGG 900  
CACCATCAGC GTCATCTCCA GTGGCTGGA CCGGGAAGAA GTCCCTGAGT ACACACTGAC 960  
CATCCAGGCC ACAGACATGG ATGGGACGG CTCACCAACC ACGGCAGTGG CAGTAGTGG 1020  
GATCCTTGT GCTAATGACA ATGCTCCAT GTTTGACCCC CAGAAGTAGG AGGCCATGT 1080  
GCCGTGAGAT GCAGTGGGCC ATGAGGTGCA GAGGCTGAGG GTCACTGATC TGGACGCCCC 1140  
CAACTCAGCA GCGTGGGCTG CCACCTACCT TATCATGGGC GGTGACGAGG GGGACCATTT 1200  
TACCTACACC ACCCACTCTG AGAGCAACCA GGGCATCTTG ACAACAGGA AGGTTTGG 1260  
TTTGAAGGCC AAAAACAGC ACACCTGTA CGTTGAAGTG ACCAACGAGG CCCCTTTTGT 1320  
GCTTAAGTGC CCAACTCCA CAGCCACCAT AGTGGTCCAC GTGGAGGATG TGAATGAGGC 1380  
ACCTGTGTT GTCCCACTCT CCAAGTGTG TGAGGTCCAG GAGGGCATCC CCACTGGGGA 1440  
GCCTGTGTGT GTCTACACTG CAGAAGACCC TGACAAGGAG AATCAAAAGA TCAGCTAACC 1500  
CATCCTGAGA GACCCAGCAG GGTGGCTAGC CATGGACCCA GACAGTGGGC AGGTACAGC 1560  
TGTGGGACCC CTGACCGGTG AGGATGAGCA GTTTGTGAGG AACACATCT ATGAAGTCAT 1620  
GGTCTTGGCC ATGGACAATG GAAGCCCTCC CACCACTGGC ACCGGAACCC TTCTGTAAAC 1680  
ACTGATTGAT GTCAATGACC ATGGCCCTAG CCTGAGCCC CGTCAGATCA CCATCTGCAA 1740  
CCAAAGCCCT GTGGCCGAGG TGCTGAACAT CACGGACAAG GACCTGTCTC CCCACCTCT 1800  
CCCTTTCCAG GCCCAGCTCA CAGATGACTC AGACATCTAC TGGACGGCAG AGGTCAACGA 1860  
GGAAGGTGAC ACAGTGTCT GTGCCCTGAA GAAGTTCTTG AAGCAGGATA CATATGACTC 1920  
GCACCTTTCT CTGTCTGACC ATGGCAACAA AGAGCAGCTG ACCGTGATCA GGGCCACTGT 1980  
GTGGGACTGC CATGGCATG TCGAAACCTG CCCTGGACCC TGGAGGGAGG GTTTCATCCT 2040  
CCCTGTGCTG GGGGCTGTCC TGGCTCTGCT GTTCTCTCTG CTGGTCTGCG TTTTGTGTGT 2100  
GAGAAGAAG CGGAAGATCA AGGAGCCCT CACTCTCCA GAAGAAGACA CCGGTGACAA 2160  
CGTCTTCTAC TATGCGGAAG AGGGGGGTGG CGAAGAGGAC CAGGACTATG ACATCACCCA 2220  
GCTCCACCGA GGTCTGGAGG CCAGGCGGGA GGTGGTTCTC CGCAATGAGG TGGACCAAC 2280  
CATCATCCCG ACACCCATGT ACCGTCTCG GCCAGCCAAC CCAGATGAAA TCGGCAACTT 2340  
TATAATTGAG AACCTGAAGG CGGCTAACAC AGACCCCA CAACCCGCTC ACGACACCT 2400  
CTTGTGTTTC GACTATGAGG GCAGCGGCTC CGACGCGCGG TCCCTGAGCT CCCTCACCTC 2460  
CTCCGCTCTC GACCAAGACC AAGATTACGA TTATCTGAAC GAGTGGGGCA GCCGCTTCAA 2520  
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GACTTCCGAG CTGTGAGGA AGTGGCCGTA GCAACTTGGC GGAGCAGGC TATGAGTCTG 2700  
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TCTTACCTGC CGTAAATGC TCAACCTGT GTCTGGGCC TGGGCTGCT GTGACTGACC 2880  
TACAGTGGAC TTCTCTCTG GAATGGAACC TTCTAGGCC TCCTGTGCA ACTTAATTTT 2940  
TTTTTTTAAAT GCTATCTTCA AAACGTTAGA GAAAGTTCTT CAAAAGTGCA GCCCAGAGCT 3000  
GCTGGGCCCA CTGGCCGTCC TGCAATTCTG GTTCCAGAC CCCAATGCCT CCCATTGGA 3060  
TGGATCTCTG CGTTTTTATA CTGAGTGTGC CTAGGTTGCC CCTTATTTT TATTTTCCCT 3120  
GTGCGTGTG TATAGATGAA GGGTGAAGAC AATCGTGTAT ATGTACTAGA ACTTTTTTAT 3180  
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Seq ID NO: 160 DNA Sequence  
Nucleic Acid Accession #: NM\_002571.1  
Coding sequence: 99..587

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1 11 21 31 41 51  
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AGGACCTGGA GCTCCCAAAG TTGGCAGGGA CCTGGCACTC CATGGCCATG GCGACCAACA 180  
ACATCTCCCT CATGGGCACA CTGAAGGCC CTCTGAGGGT CCACATCACC TCACTGTTGC 240  
CCACCCCGCA GGACAACCTG GAGATCGTTC TGACAGATG GGAGAACAAC AGCTGTGTTG 300  
AGAGAAGGCT CTTTGGAGAG AAGACTGGGA ATCCAAAGAA GTTCAAGATC AACTATACGG 360  
TGGCGAAGCA GGCCACGGCTG CTGATACTG ACTACGACAA TTTCTGTGTT CTCTGCTTAC 420  
AGGACACCA CACCCCATC CAGAGCATGA TGTGCCAGTA CCTGGCCAGA GTCTGTGTTG 480  
AGGACGATGA GATCATGCAG GGATTCATCA GGGCTTTT CAG GCCCTGCCC AGGCACCTAT 540  
GGTACTTCTG GGACTTGAAA CAGATGGAAG AGCCGTGCGG TTTCTAGCTC ACCTCGCCT 600  
CCAGGAAGAC CAGACTCCCA CCCTTCCACA CCTCCAGAGC AGTGGGACTT CCTCTGCCC 660  
TTTCAAGAA TAACCAAGC TCAGAAGAGC ATGACGTGCT CATCTGTGTC GGCATCCCT 720  
TCTCTGTGCA CACCTGCACC ATTGCCATGG GAGGCTGCT CCTGGGGG AGAGTCTCTG 780  
GCAGAGGTTA TTAATAAACC CTTGGAGCAT G 811

Seq ID NO: 161 DNA Sequence  
Nucleic Acid Accession #: NM\_001327.1

Coding sequence: 89..631

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1      11      21      31      41      51
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5 AGCAGGGGGC GCTGTGTGTA CCGAGAATAC GAGAATAOCT CGTGGGCCCT GACCTTCTCT 60
CTGAGAGCCG GGCAGAGGCT CCGAGGCCAT GCAGGCCGAA GGCCGGGGCA CAGGGGGTTC 120
GACGGGGGAT GCTGATGGCC CAGGAGGCC TGGCATTCTT GATGGCCAG GGGGCAATGC 180
TGGCGGCCCA GGAGAGGGCG GTGCCACGGG CGGCAGAGGT CCGCGGGGCG CAGGGGCAGC 240
AAGGGCTCG GGGCCGGGAG GAGGCGCCCG GCGGGGTCCG CATGGCGCGG CGGCTTCAGG 300
GCTGAATGGA TGCTGCAGAT GCGGGGCCAG GGGGCGGAG AGCCGCTGCG TTGAGTTCTA 360
CCTCGCCATG CCTTTCGCGA CACCCATGGA AGCAGAGCTG GCCCGCAGGA GCCTGGGCCA 420
GGATGGCCCA CGGCTTCCCG TGCCAGGGGT GCTTCTGAAG GAGTTCACTG TGTCCGGCAA 480
CATACTGACT ATCCGACTGA CTGCTGCAGA CCACCGCCAA CTGCAGCTCT CCATCAGCTC 540
CTGTCTCCAG CAGCTTTCCC TGTGATGTG GATCAGCAG TGCTTTCTGC CCGTGTTTTT 600
GGCTCAGCTC CCTCAGGGC AGAGGCGCTA AGCCAGCCTT GCGGCCCTT CTAGGTTCAT 660
15 GCCTCTCCCT CTAGGGAATG GTCCAGCAC GAGTGGCCAG TTCATTGTGG GGGCTGATT 720
GTTTGTCTCG GGAGGAGGAC GCCTTACATG TTTGTTTCTG TAGAAAATAA AACTGAGCTA 780
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Seq ID NO: 162 DNA Sequence  
Nucleic Acid Accession #: NM\_020994

Coding sequence: 53..459

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20 CCTGTGGGCG CCTGACCTTC TCTCTGAGAG CCGGGCAGAG GCTCCGGAGC CATGCAAGCC 60
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25 CCGTATGGCC CAGGGGGCAA TGCTGGCCGC CCAGGAGAGG CCGGTGCCAC GGGCGGCAGA 180
GGTCCCGGG GCGCAGGGCG AGCAAGGGCC TCGGGGCCGA GAGGAGGCGC CCGCGGGGTT 240
CCGCATGGCG GTGCCGCTTC TGCGCAGGAT GGAAGGTGCC CCGCGGGGCG CAGGAGGGCG 300
GACAGCGCCG TGCTTCAGTT CCGACTGACT GCTGCAGACC ACCGCCAATC GCAGCTCTCC 360
ATCAGCTCCT GTCTCCAGCA GCTTCCCTG TTGATGTGGA TCACGCAATG CTTTCTGCCC 420
30 GTGTTTTTGG CTCAGGCTCC CTCAGGGCAG AGGCGCTAAG CCGAGCTTGG CGCCCTTCCC 480
TAGGTCTATG CTCTCCCTCT AGGGAATGGT CCGAGCACGA GTGGCCAGTT CATTGTGGGG 540
GCTGATTTGT TTGTGCTGG AGGAGGACGG CTTACATGTT TGTTCCTGTA GAAAAATAAG 600
CTGAGCTA 608
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Seq ID NO: 163 DNA Sequence  
Nucleic Acid Accession #: NM\_006928.2

Coding sequence: 1..1986

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1      11      21      31      41      51
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GTGGGGGCTA CAAAGTACC CAGAAACAG GACTGGCTTG GTGTCTCAG GCAACTCAGA 120
ACCAAAGCCT GGAACAGGCA GCTGTATCCA GAGTGACAG AAGCCAGAG ACTTGACTGC 180
TGSAGAGGTG GTCAAGGTTC CCTCAAGTTC AGTAATGATG GGCCTACACT GATTGTGCTA 240
AATGCCTCCT TCTCTATTGC CTGAACTTC CCTGGAAGCC AAAAGGTATT GCCAGATGGG 300
45 AGGTTATCT GGGTCAACAA TACCATCATC AATGGGAGCC AGGTGTGGGG AGGACAGCCA 360
GTGTATCCCC AGGAACTGA CGATGCCTGC ATCTTCCCTG ATGGTGGACC TTGCCCATCT 420
GGCTCTTGTT CTCAGAAGAG AAGCTTTGTT TATGTCTGGA AGACCTGGGG CCAATACTGG 480
CAAGTTCTAG GGGGCCCACT GTCTGGGCTG AGCATTGGGA CAGGCAGGGC AATGCTGGGC 540
ACACACACCA TGGAAAGTGA TGCTACCAT CGCCGGGGAT CCGCGAGCTA TGTGCTCTTT 600
GCTCATTCGA GCTCAGCCTT CACCATTACT GACCAGGTGC CTTTCTCCGT GAGCGTGTCC 660
50 CATTGTGGGG CTTGGATGG AGGGAACAG CACTTCTGTA GAAATCAGCC TCTGACCTTT 720
GCCCTCCAGC TCATGACCC CAGTGGCTAT CTGGCTGAAG CTGACCTCTC CTACACCTGG 780
GACTTTGGAG ACAGTAGTGG AACCTGTATC TCTGGGCGAC TTGTGTCAC TCATACTTAC 840
CTGGAGCCTG GCCCAGTCAC TGCCAGGTG GTCTGTCAGG CTGCCATTCC TCTCACTTCC 900
55 TGTGGTCTCT CCCAGTTTCC AGGCACCACA GATGGGCACA GGCCAACTGC AGAGGCCCCCT 960
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CCAACCTGAG AGCCCTCTGG AACCATATCT GTGCAGGTGC CAACCACTGA AGTCATAAGC 1080
ACTGCACCTG TGCAGATGCC AACTGCAGAG AGCACAGGTA TGACACTTGA GAAGGTGCCA 1140
GTTTCAGAGG TCATGGGTAC CACTGTGCA GAGATGTCAA CTCAGAGGCG TACAGGTATG 1200
60 ACATCTCAG AGGTATCAAT TGTGGTCTT TCTGGAACCA CAGCTGCACA GGTAACAACT 1260
ACAGAGTGGG TGGAGACCAC AGCTAGAGAG CTACCTATCC CTGAGCTGTA AGGTCCAGAT 1320
GCCAGCTCAA TCATGTCTAC GGAAGTATT ACAGTTTCCC TGGGCCCCCT GCTGGATGGT 1380
ACAGCACCT TAAGGCTGGT GAAGAGACAA GTCCCTCTGG ATTGTGTCT GTATCGATAT 1440
GGTTCTTTT CCGTCACCTT GGACATTGTC CAGGTATTG AAGTGGCGA GATCCTGCAG 1500
65 GCTGTGCCGT CCGGTGAGGG GGATGCATTG GAGCTGACTG TGTCTTGCCA AGGCGGGCTG 1560
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TGCCAGCCTG TGCTACCCAG CCCAGCCTGC CAGCTGGTTC TGCAACAGAT ACTGAAGGGT 1680
GGCTCGGGGA CATACTGCCT CAATGTGTCT CTGGCTGATA CCAACAGCTT GGCAGTGGTC 1740
AGCACCCAGC TTATCATGCC TGGTCAAGAA GCAGGCTTGG GGCAGGTTCC GCTGATCGTG 1800
70 GGCATCTTGG TGGTGTGAT GGCTGTGGTC CTGTCATCTC TGATATATAG GCGCAGACTT 1860
ATGAAGCAAG ACTTCTCCGT ACCCAGTTG CCACATAGCA GCAGTCACTG GCTGGGCTTA 1920
CCCCGATCT TCTGCTCTTG TCCCATTTGG GAGAATAGCC CCCTCTCTAG TGGGCAGCAG 1980
GTCTGA 1986
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Seq ID NO: 164 DNA Sequence

Nucleic Acid Accession #: NM\_001922.2

Coding sequence: 415..1974

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AGATGGTGAG AAGCGCTACC CTCATTAAAT TTGGTTGTTA GAGGCGCTTC TAAGGAAAT 180
AAGTCTGTGA GTTGTGTTGA TCACATAAAA TTTGTGTGTC ACGTTTATGT ACACATGTGC 240
ACACATGTAA CCTCTGTGAT TCTGTGGGT ATTTTITTA GAAGAAAGGA ATAGAAAGCA 300
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AAGAAAAATA AAAAATACTG AAAAGAAAAG ACTGAAAGAG TAGAAGATAA GGAGAAAAGT 360  
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CCCTTTTGGT GGGGGTTTCT GCTCAGTTGC TTGGGCTGCA AAATCTTGCC AGGAGCCGAG 480  
GGTCAGTTCC CCGGAGTCTG CATGACGGTG GACAGCTAG TGAACAAGGA GTGCTGCCCA 540  
CGCTGGGGTG CAGAGTCGGC CAATGCTCTG GGCTCTCAGC AAGGCCGGGG GCAGTGCACA 600  
GAGGTGGGAG CCGACACAAG GCCCTGGAGT GGTCTCTACA TCCTACGAAA CCAGATGAC 660  
CGTGAGCTGT GGCCAAGAAA ATTCTTCCAC CGGACCTGCA AGTGACAGG AAACCTTGCC 720  
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CCACCACTGA TTGCGCAGAA CATCCATTCC TTGAGTCTC AGGAAAGAGA GCAGTTCTTG 840  
GGCGCCTTAG ATCTCGGAA GAAGAGAGTA CACCCGACT ACCTGATCAC CACACAACAC 900  
TGCTGGGGCC TGCTGGGGCC CAATGGAAAC CAGCGGAGT TTGCCAAGT CAGTGTATT 960  
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CCCTACAGGG CCATAGATT CTACATCAA GGACCTGCAT TTGTTACCTG GCACGGTAC 1080  
CATTTGTTGT GTCTGGAAAG AGATCTCCAG CCACTCATG GCAATGAGTC TTTTGTCTTG 1140  
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GGGGCAGCGA GACCAGACGA TCGACTCTG ATTAGTCGGA ACTCAAGATT CTCAGCTGG 1260  
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AAGACATAC GAGATTGCCT GTCTCTCCAG AAGTTTGACA ATCTCCCTT CTTCAGAAC 1440  
TCTACTTTTA GTTTCAGGAA TGCTTTGGAA GGGTTTGATA AAGCAGATGG GACTCTGGAT 1500  
TCTCAAGTA TGAGCCTTCA TAATTTGGTT CATCTCTCC TGAACGGGAC AAACGCTTTG 1560  
CCACATTCAG CCGCAATGA TCCCATTTT GTGGTTCTTC ATTCTTTAC TGATGCCATC 1620  
TTTGATGAGT GGATGAAAAG ATTTAATCTT CCTGCGATG CCTGGCTCA GGAGCTGGCC 1680  
CCTATTGGTC ACAATCGGAT GTACAACATG GTTCTTTCT TCCCTCCAGT GACTAATGAA 1740  
GAACCTTTT TAACCTCAGA CCAACTGGC TACAGCTATG CCATCGATCT GCCAGTTTCA 1800  
TTTGAAGAAA CTCCAGGTTG GCGCAACT CTCTTAGTAG TCATGGGAAC ACTGGTGGCT 1860  
GTGGTTGCTC TTTTGTGCT GTTGGCTTT CTCAATATA GAAGACTTCG AAAAGGATAT 1920  
ACACCCCTAA TGGAGACACA TTTAAGCAGC AAGAGATACA CAGAAGAAC CTAGGGTGCT 1980  
CATGCCCTAC CTAAGGAAAG AGGCTGGCCA AGCCACAGTT CTGACGCTGA CAATAAAGGA 2040  
ACTAATCTC ACTGTTCCCT CTGAGTTGA AGATCTTTGA CATAGTTCT TCTATAGTGA 2100  
TGATGATCTC ATTCAGAGA TGCTTAGCTG TAGTTCCGC TTTGCTTGT TGTTTAACAA 2160  
ACCCAATAA AGTGCTTGA GCTACCTCTA CCTCAATAA AAGATAGACC TGACAAATTG 2220  
TGATATCTAA TAATAACCCC CCCCCAATA TTGATTAAGC CTCTCCTTT TCTGAAAGCA 2280  
TTTAAAAAA A 2291

Seq ID NO: 165 DNA Sequence  
Nucleic Acid Accession #: XM\_059422.3  
Coding sequence: 207..1400

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1 11 21 31 41 51  
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GACCTCTCTC GCGGCGGCGG CTTGGCTGCG TCCTCCGACT CCGCGGCGCG CCGAGCCAG 120  
CGCTCCGCTC CGGTTGCGGC CGCACCGCCC TCGCGGCGCG CCGGCTGGGG ATCCAGCGAG 180  
CGCGCTCGTC CTTGGTGGA GGAACCATGA ACTGGCATCT CCGGCTCTTC CTCTTGGCCT 240  
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CCAACAGCGG GATCCAGGTT TTAATCAGA TTGTGAAGTC GAGGCTCAT GACAACATCG 360  
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Nucleic Acid Accession #: XM\_040512.3  
Coding sequence: 382..1302

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Seq ID NO: 167 DNA Sequence  
 Nucleic Acid Accession #: BC008826  
 Coding sequence: 188..2695

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Seq ID NO: 168 DNA Sequence  
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 Coding sequence: 250..4956

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1 11 21 31 41 51
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5 TATTCCAAAG CTGGGGCTGT GGCAGAAAG GTCTTGTCT CAATCCGAAC AGTCATAGCC 1140  
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Seq ID NO: 172 DNA Sequence  
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 Coding sequence: 378..773

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 AATCCATAGA AGGAACCTGT GAATTTAAAA ATGTTTCTTT CAATTATCCA TCAAGACCAT 240  
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 30 TCGGTCTCAA TGGCAGTGGG AAGGATACCG TAGTCCAGCT TCTGCAGAGG TTATATGATC 360  
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 35 AAAAAGGAGC TCAATAGATG GGAGGGCAGA AACAGAGGAT CGCAATTGCT CGTGCCCTTAG 660  
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 AGTCAGCTGT TCAAGCTGCA CTGGAGAAGG ATACCCCCAG GTATTTCATT TGACCTAATT 780  
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Seq ID NO: 173 DNA Sequence  
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 GTGCTGAGCG CAGCAGCTG GCGCTGTCTC ACGGATGCT GCTCCAGGCG CGCGCGGAGT 420  
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 GAGCTGAGCG TGGTCCGCTG CAACCAAGGC AAGGCGTCGG ACGTGCAGGA CTTCTGAAG 660  
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 60 GCAACTGAAT TGGCAAAAGA GAATATTAAA TGTTTCTTTG AGGGCTCGCA TCCAAAAGAA 900  
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 65 TATTGCTTTA TTAATAATA AACATTGGTA TTTT 1175

Seq ID NO: 174 DNA Sequence  
 Nucleic Acid Accession #: NM\_032211.5  
 Coding sequence: 152..2422

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 75 TCTGTTCTCG TGCTGTCTAG GCCAGCCCCC TCCCAGCAGG CCACAGTCAC TGGGCACAC 240  
 TAAGCTCCCG CTGGTGGGCC CAGAGAGCAA GCCAGAGGAG GCGCGCCTGG AGGTGCTGCA 300  
 CCAGGGCCAG TGGGCAACCG TGTGTGATGA CAACTTGTCT ATCCAGGAGG CCACAGTGGC 360  
 TTGCGGCCAG CTGGGCTTGG AAGCTGCCTT GACCTGGGCC CACAGTGCCA AGTACGGCCA 420  
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 GCCCCAGGCG CCGCGGCTGG AGGAGGTGGC GCTCAAGCCC ATCCTTGCCA GTGCCAAGCA 660  
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GGAGGGGCTA TTGAGGTGTC AGGTGAGGTG GAACGGGCTG CCAAGCTGGG GGAGCGTGTG 1500  
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CGGCCCGCTC AGCCAGCTGT ATTGTGCCCA CGAGGAGAAC TGCTCTCCA AGTCTGCGGA 1860  
TCACATGGAG TGCCGCTAAG GATACCGCGG CCTATTGGGC TTCTCCACAC AGATCTACAA 1920  
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CTGGGACACC TACCGGATG ACATTGATTG CCACTGGGTT GATATCAGAG ATGTGGGCCC 2220  
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Coding sequence: 234..1130

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ACCAAGTGTG GGGAGAGGTG GTGGCGCTTA AGAAATCCG CCTGGACACT GAGACTGAGG 360  
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Coding sequence: 234..1028

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Coding sequence: 118..1197

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TTGTGTATTC TCTCTTAACA CACAGAAAT CTGCTGTCTA GATCAGGAAT TTCTATCTGT 1440  
TATATCGACC AGAATGTGT GATTAAAGA GAACATAAGG AAGTGGATTG AATACAGCAG 1500

5 TCTCAACTGG GGGCAATTTT GCCCCCCAGA GGACATTGGG CAATGTTTGG AGACATTTTG 1560  
GTCATTATAC TTGGGGGGTT GGGGATGGT GGGATGTGTG TGCTACTGGC ATCCAGTAAA 1620  
TAGAAGCCAG GGGTGCCGCT AAACATCTTA TAATGCACAG GGCAGTACCC CACAACGAAA 1680  
AATAATCTGG CCCAAAATGT CAGTTGTACT GAGTTTGAGA AACCCAGCC TAATGAAACC 1740  
CTAGGTGTGG GGCTCTGGAA TGGGACTTTG TCCCTTCTAA TTATTATCTC TTCCAGGCT 1800  
CATTAGCTTA TTCTTACTGA CATAACAGTC TTTAGCTGGT GCTATGGTCT GTTCTTTAGT 1860  
TCTAGTTTGT ATCCCTCAA AAGCCATTAT GTTGAATCC TAATCCCAA GGTGATGGCA 1920  
TTAAGAAGTG GGCTTTTGGG AAGTGATTAG ATCAGGAGTG CAGAGCCCTC ATGATTAGGA 1980  
TTAGTGCCCT TATTTAAAAA GGGCCAGAG AGCTAACTCA CCTTCCACC ATATGAGGAC 2040  
10 GTGGCAGAA GATGACATGT ATGAGAACCA AAAACAGCT GTGCCAAAC ACCGACTCTG 2100  
TCGTTGCCCT GATCTTGAAC TTCCAGCTC CAGAACTATG AGAAATAAAA TTCTGTGTTT 2160  
TGTAATAAAA AAAAAAAAAA A 2181

15 Seq ID NO: 178 DNA Sequence  
Nucleic Acid Accession #: NM\_002346.1  
Coding sequence: 136..531

1 11 21 31 41 51  
1 GCTCCGCCA GCGCGGTCC AGAGCGCGG AGGTTGCGG AGCTCCGCCA GGCTGCTGGT 60  
20 ACCTGCGTCC GCCCGGGAG CAGGACAGGC TGCTTTGGTT TGTGACCTCC AGGCAGGACG 120  
GCCATCTCT CCAGAAATGA GATCTTCTTG CCAGTGCTGC TGGCTGCCCT TCTGGGTGTG 180  
GAGCGAGCCA GCTCGCTGAT GTGCTTCTCC TGCTTGAACC AGAAGAGCAA TCTGTACTGC 240  
CTGAAGCCGA CCATCTGCTC CGACCAAGAC AACTACTGCG TGACTGTGTC TGCTAGTGCC 300  
GGCATTGGGA ATCTGTGAC ATTTGGCCAC AGCCTGAGCA AGACTGTTC CCGGCTGTC 360  
25 CCCATCCGAG AAGGCGTCAA TGTGCTGTG GCTTCCATGG GCATCAGCTG CTGCCAGAGC 420  
TTTCTGTGCA ATTTCAATGC GGCAGATGCC GGGCTGCGGG CAAGCGTCAC CTGCTGGGT 480  
GCCGGCTGCG TGCTGAGGCT GCTGCCGCC CTGCTGCGGT TTGCCCCCTG ACCGCCAGA 540  
CCCTGTCCCC CGATCCGCCA GCTCAGGAAG GAAAGCCAG CCCCTTCTGG ATCCCAAGT 600  
GTATGGGAGC CCTGACTCC TCAGTGCCCT GATCTGTGCC CTGTTCCCA GGTGAGGCC 660  
30 ACCCTCTGGA CCTCAGCTG CCCAGGCCCT TGCTCTGCCC CAAGTGGGCC AGCTGCCCTC 720  
ACTTCTGGGG TGGATATGT GACCTTCTT GGGGAGTGC GGAAGGGACG AGGGTTCCCT 780  
GGAGTCTTAC GGTCCAACAT CAGACCAAGT CCCATGGACA TGCTGACAGG GTCCCCAGGG 840  
AGACCGTGC AGTAGAGATG TGTGCTGGC TGTGTACGTG GGTGTGAGT GCAAGTGAGA 900  
GCAAGTGGCG GCTTCTGGGG GCCATGTTG GGGAGGGAGG TGTGCCAGCA GCCTGGAGAG 960  
35 CCTCAGTCCC TGTAGCCCC TGCCCTGGCA CAGCTGCATG CACTTCAAGG GCAGCTTTG 1020  
GGGGTGGGG TTTCTGCCAC TTCCGGGTCT AGGCCCTGCC CAAATCCAGC CAGTCTGCC 1080  
CCAGCCACCC CCCACATTGG AGCCCTCTG CTGCTTGGT GCCTCAAATA AATACAGATG 1140  
TCCCC 1145

40 Seq ID NO: 179 DNA Sequence  
Nucleic Acid Accession #: XM\_113526.2  
Coding sequence: 253..2409

1 11 21 31 41 51  
45 TGGGCGCCGG CGAGCGGAG GGAGATCCGA GCGGCGCGG CAAGCTGGCT GCGAGCGGCT 60  
GAGCAGCACT CCAAGCTGCG CGGCTTTGG TCTCCAGGAC TTGTCCAGC AGCCCTCCGA 120  
ACTGAGAAAT ACACCATCGG ACCCTGGCT CTGAGGCTTT CAGACTTGGG TGTGTACCA 180  
CTGCCAGGCT TCCAGGGCTC CAATTCGAG ACGGCTGTT GTGGGACAGT CTCTGTAATC 240  
50 GCGAAAGAGC CATGGAAGA CCTGGGGGAA AACACCATGG TTTTATCCAC CCTGAGATCT 300  
TTGAACAAT TCATCTCTCA GCGTGTGGAG GGAGGCTCTG GACTGGATAT TTCTACCTCG 360  
GCCCCAGGTT CTCTCGAGAT GCAGTACAG CAGAGCATGC AGCTGGAGGA AAGAGCAGAG 420  
CAGATCCGTT CGAAGTCCCA CCTCATCCAG GTGGAGCGGG AGAAAAATGA GATGGAGCTG 480  
AGTCACAGGA GGGCTCGAGT GGAGCTGGAG AGAGCAGCCA GCACAGTGC CAGGAATAC 540  
55 GAGCGTGAGG TCGACCCCAA CCAGGAGCTC CTGACGCGCA TCCGCGAGCT TCAGGAGCGG 600  
GAGGCGCGGG CGGAGGAGAA GATGCAGGAG CAGCTGGAGC GCAACAGGCA GTGTGAGCAG 660  
AACTTGGATG CTGCAGCAAA GAGGCTGCGT GAGAAAGAGG ACAGTCTGCG CCAGGCTGCG 720  
GAGACCATCA ACGCACTGAA GGGGAGGATC TCGGAACCTG AGTGAGAGCT GATGGACAG 780  
GAGATGCGGG TGAAGCGCCT GGAGTCGGAG AAGCAGGAGC TGCAGGAGCA GCTGGACCTG 840  
60 CAACACAAAA AATGCCAGGA AGCCAATCAG AAAATCCAGG AACTCCAGGC CAGCCAAGAA 900  
GCAAGAGCAG ACCACGAGCA GCAGATTAG GATCTGGAGC AGAAGCTGTC CCTGCAAGAG 960  
CAGGATGACG CGATTGTGAA GAACATGAAG TCTGAGCTGG TACGGCTCCC TAGGCTGGAA 1020  
CGGAGCTGCA AGCAGCTGCG GGAGGAGAGC GCGCACCTGC GGGAGATGAG AGAGACCAAC 1080  
GGGCTGCTCC AGGAAGAGCT GGAAGGCTG CAGAGGAAGC TGGGGGCCCA GGAGAAGATG 1140  
65 CAGGAGACCG TGGTTGGCTT GGAGCTGGAG AACGAGAGGC TGCTGCCCAA GCTGCAAGC 1200  
TGGAGAGAGC TGGACAGAC CATGGGCTG AGCATCAGGA CTCAGAGA CTTTCCAGA 1260  
TTCTGTGTTG AGCTGAGCA GAGGAGCTT GCCTTGAAGG ACAAGAACAG CGCGTCAAC 1320  
AGCAGCGCCC GGGGCTGGA GAAGCCAGG CAGCAGCTGC AGGAGGAGCT CCGCAGGTC 1380  
AGCGGCGCAG TGTGGAGGA GAGGAAGAG CGCGAGACC ACCGAGGCTT GGCCCGGAGG 1440  
70 CTCCAGAAAC GGGTCTGCT GCTCACCAG GAGCGGAGC GTATGCGGGC CATCTGGGG 1500  
TGCTAGCAGA GCGAGCTGAC CCGGCGGAG TACTCACCCC AGCTGACGCG GCGCATGCGG 1560  
GAGGCTGAGG ATATGGTGCA GAAGGTGCAC AGCCACAGCG CCGAGATGGA GGCTCAGCTG 1620  
TGCAGGCCC TGGAGGAGCT GCGAGGCCAG AAACAAGAG CAGACATGCT GGAGATGGAG 1680  
CTGAAGATGC TGAAGTCTCA GTCCAGCTCT GCCGAACAGA GCTTCTGTT CTCCAGGGAG 1740  
75 GAGGCGGACA CGCTCAGGTT GAAGTTCGAG GAGCTGAGG CCGAGCGGAG TCGGCTGGAG 1800  
GAGGAAGAGA GGATGCTGGA GGCACAGCT GAGCGGCGAG CTCTGACGGG TGACTATGAC 1860  
CAGAGCAGGA CCAAGTGTCT GCACATGAGC CTGAACCCCA CCAAGTGTGC CAGGCAGGCG 1920  
CTGCGCGAGG ACCACAGCCA GCTCAGGCG GAGTGGAGC GACTGCGCGG GCTCTGCGC 1980  
GCCATGAGGA GAGGAGGAC CGTCCAGCC GACCTTGAAG CTGCGCGCGG GAGTCTGCCA 2040  
TGGTCCAAGG AGGTGGCAGA GCTGAAGAAG CAGGTGGAGA GTGCGGAGCT GAAGAACCAG 2100  
80 CGGCTCAAGG AGGTTTCCA GACCAAGATC CAGGAGTTCC GCAAGGCTGC CTACACGCTC 2160  
ACCGGCTACC AGATCCACAT CACCACCGAG AACCAAGTACC GGTGACCTC GCTGTACGCC 2220  
GAGCACCCAG GCGAGTGCTT CATCTTCAAG GCCACAGCC CCTCGGTTT CAAGATGCAG 2280  
CTACTGGAGA CAGAGTTTTC ACACACCGTG GCGAGCTCA TCGAGGTGCA CCTCGCGCGC 2340  
CAGGACAGCA TCCTCGCTT CCTCAGCTG CTCACCTCG AGCTCTTCA CCGCCAGACC 2400

5 GTGGCGTAGC CTGCAGGCTC GGGGGCATAG CCGAGGCCAC TCTGCTTGGC CTGACCTGCA 2460  
GGTCCCCGCG CCGGCCAGCC ACAGGCTGGG TGCAOCTCTT GCGTCTCCAG CCCCACAGGG 2520  
CAGCAGCATG ACTGACAGAC ACGCTGGGAC CTACGTGGGG CTTCCTGCTG GGGCGGCCAG 2580  
CACCTCTCCG ACGTGCAGAC CCGATGCGTC CCGAGGCTG GTGTGTGGGC GTCCGCCACC 2640  
AGCCTGGGTT CCTCACCTTG TGAATAAAAA TCTTCTCCCC TAG 2683

Seq ID NO: 180 DNA Sequence  
Nucleic Acid Accession #: NM\_000273.1  
Coding sequence: 1..1275

10 1 11 21 31 41 51  
| | | | |  
ATGACCCAGG CAGSCCGGG GGGTCTCTGC ACACCCGAGC CGCGTCCGG AACACAGCCC 60  
ATGGCCTCCC CCGGCTAGG GACCTTCTGC TGCCCCAGCG GGGACGCAGC CACGCAGCTC 120  
GTGCTGAGCT TCCAGCCGCG GCGCTTCCAC GCGCTCTGCC TGGGCAGCGG CGGGCTCCGC 180  
15 TTGGCGCTGG GCCTTCTGCA GCTGCTGCCG GGGCGCGGGC CCGCGGGGCC CGGGTCCCCC 240  
GGGAGTCCCG CCGCGGCTC GGTCCGCTC CTGGCGCTG CCGCTGCTG CGACCTTCTC 300  
GGCTGCTCGG GTATGGTAT CCGTCCACC GTGTGGTAG GATTCCCAA TTTTGTGAC 360  
AGGCTCTGGG ATATGAACCA CACGGAAATT TGGCTCTGCT GTTCTGCGT GGGGAGTGGG 420  
ATGTGGATCC AGCTGTGTA CAGTGCTGCT TTCTGGTGGC TGTTTGCTA TGCAGTGGAT 480  
20 GCTTATCTGG TGATCCGAG ATCGGCAGGA CTGAGCAACA TCCTGCTGTA TCACATCATG 540  
CGGTGGGGCC TGGCCACCTT GCTCTGTGT GAGGAGCGCG CCATGCTCTA CTACCTCTCC 600  
GTCTCCAGCT GTAGAGCGGG CTTGAGCCAC GGCATCCCC ACTATGTCAC CATGTACCTG 660  
CCCTGCTGCT TGGTCTCGT GCGCAACCCC ATCTCTTCC AAAAGACAGT GACTGCAGTG 720  
GCCTCTTAC TTAAGGAAG ACAAGGCAIT TACACGAGA ACGAGAGGAG GATGGAGGCC 780  
25 GTGATCAAGA TCGGATTTT CAAAATCATG CTGGTTTAA TTATTGTGT GTTGTGCAAT 840  
ATCATCAATG AAAGCTTTT ATTCTATCTT GAGATGCAA CAGATATCAA TGGAGGTGCT 900  
TTGAAACCTG TCAGAACGCG AGCCAAGACC ACATGGTTTA TTATGGGAAT CCGAATCCA 960  
GCCGAGGAT TTCTCTGTC TTGGCTCTC TACGGCTGGA CAGGATGCAG CCTGGTITT 1020  
30 CAGTCTCCCA GGAAGAGAT CCAATGGGAA TCACTGACCA CCTGGCTGC TGAGGGGGCT 1080  
GCCCATCCG CACTGATGCC CCAAGAAAC CCTGCTCCG GGAAGGTGTC TCAAGTGGGT 1140  
CAGCAGACTT CTGACGAAG CTTGAGCATG CTGTCTGAAG GTTCTGATG CAGCACAATT 1200  
GAAATTCACA CTGCAAGTGA ATCTGCAAC AAAAATGAGG GTGACCTGC TCTCCCAACC 1260  
CATGGAGACC TATGAAGGGG ATGTGCTGGG GGTCCAGACC CCATATTCT CAGACTCAAC 1320  
35 AATTCTGTTT CTTTGAAGCT GTTCTCTAC CTTCCCAACA CTGCACTGCC GAAGTGTAGC 1380  
GGCCCCAAAA CCTTGTCTCT ATCCACAGCT AGAGCTTCTT CCGAAGGGC CTTTAGGATA 1440  
GGAGAAAGGG TTCAATGACA CACGTGTGAG AATGGAAGAG CCCCCTCCAG ACCACTCTAC 1500  
AGCTGCTCTA GCCTTAGTTG CCACTAGGAA GTTTCTGAG GCTGGCTGTA AAGTAAGTGT 1560  
AAGGTCCACA TCCTTGGGGA AGTAGTTAAA TAAATAGTT ATGACTG 1607

Seq ID NO: 181 DNA Sequence  
Nucleic Acid Accession #: NM\_139317.1  
Coding sequence: 174..1070

45 1 11 21 31 41 51  
| | | | |  
CCCTGGGATA CTCCCCCCC AGGGTGTCTG GTGGCAGGCC TGTGCTATC CTGCTGTCC 60  
CCAGGGTGGG CCGCGGGGGT CAGGAGCTCC AGAAGGGCCA GCTGGGCATA TTCTGAGATT 120  
GGCCATCAGC CCCCATTCTT CTTGCAAAAC TGGTCAGAGC CAGTGTTCCT TCCATGGGAC 180  
CTAAGACAGG TGCCAAGTGC CTGCACCGTG GACCACAGCC GAGCCACTGG GCAGCCGGTG 240  
ATGATCCACG GCAGAGCGG TGTGACCCG GCTCTCTGGG CAGCCCTGTC CTAGGCGCTGG 300  
50 ACACCTGCAG AGCCTGGGAC CAGCTGGATG GGCAGATCTT GGGCCAGCTG CCGCCCTGTA 360  
CAGAGGAGGA AGAGGAGGAG GGGCGCGGGG CCACCTGTCT CAGGGGGGCT GCCTTCCCGG 420  
GCATGGGCTC TGAGAGTTTG CGTCTGGGCT CTTCTATGA CTGGCCGCTG ACTGCTGAGG 480  
TGCCACCGGA GCTGCTGGCT GCTGCGGCTT TCTTCCACAC AGGCCATCAG GACAAGGTGA 540  
55 GCGCTTCTTT CTGCTATGGG GGCCTGCAGA GCTGGAAGCG CGGGGACGAC CTTTGAAGCG 600  
AGCATGCCAA GTGGTTCCCC AGCTGTCACT TCTGCTCCG GTCAAAAGGA AGAGACTTTG 660  
TCCACAGTGT GCAGGAGACT CACTCCAGC TGTGGGCTC CTGGGACCGG TGGGAAGAAC 720  
CGGAAGACCG AGCCCTGTG GCGCCCTCCG TCCCTGCTCT TGGGTACCTT GAGCTGCCCA 780  
CACCCAGGAG AGAGGTCCAG TCTGAAAGTG CCGAGGAGCC AGGAGGGGCT AGTCCAGCCG 840  
60 AGGCCACAGG GCGGTGTGG GTTCTTGAGC CCGCAGGAGC CAGGATGTG GAGGCGCAGC 900  
TGCGGCGGCT CCAAGAGGAG AGGACGTGCA AGGTGTGCTT GGACCGCGCC GTGTCCATCG 960  
TCTTGTGCCC GTGCGGCCAC CTGCTCTGTG CTGAGTGTGC CCGCGGCTG CAGCTGTGCC 1020  
CCATCTGCAG AGCCCGGCTC CCGAGCGGGG TCGCACCTT CCTGTCTAG GCCAGGTGCC 1080  
ATGGCGGGCC AGGTGGGCTG CAGAGTGGGC TCCTGCCCC TCTGTGCTG TTCTGGAAGT 1140  
65 TGTCTGGGCT GCTGTGAGGA TGGCAGAGCT GGTGTCCATC CAGCACTGAC CAGCCCTGAT 1200  
TCCCCGACCA CCGCCAGGG TGGAGAAGGA GGCCTTGCT TGGCGTGGGG GATGGCTTAA 1260  
CTGTACCTGT TTGATGCTT CTGAATAGAA ATAAAGTGGG TTTTCCCTGG AGGTACCCAG 1320  
CA 1322

Seq ID NO: 182 DNA Sequence  
Nucleic Acid Accession #: NM\_022161.2  
Coding sequence: 174..1016

75 1 11 21 31 41 51  
| | | | |  
CCCTGGGATA CTCCCCCCC AGGGTGTCTG GTGGCAGGCC TGTGCTATC CTGCTGTCC 60  
CCAGGGTGGG CCGCGGGGGT CAGGAGCTCC AGAAGGGCCA GCTGGGCATA TTCTGAGATT 120  
GGCCATCAGC CCCCATTCTT CTTGCAAAAC TGGTCAGAGC CAGTGTTCCT TCCATGGGAC 180  
CTAAGACAGG TGCCAAGTGC CTGCACCGTG GACCACAGCC GAGCCACTGG GCAGCCGGTG 240  
ATGATCCACG GCAGAGCGG TGTGACCCG GCTCTCTGGG CAGCCCTGTC CTAGGCGCTGG 300  
80 ACACCTGCAG AGCCTGGGAC CAGCTGGATG GGCAGATCTT GGGCCAGCTG CCGCCCTGTA 360  
CAGAGGAGGA AGAGGAGGAG GGGCGCGGGG CCACCTGTCT CAGGGGGGCT GCCTTCCCCG 420  
GCATGGGCTC TGAGAGTTTG CGTCTGGGCT CTTCTATGA CTGGCCGCTG ACTGCTGAGG 480  
TGCCACCGGA GCTGCTGGCT GCTGCGGCTT TCTTCCACAC AGGCCATCAG GACAAGGTGA 540  
GGTGTCTTCT CTGCTATGGG GGCCTGCAGA GCTGGAAGCG CGGGGACGAC CCTGGAAGCG 600  
AGCATGCCAA GTGGTTCCCC AGCTGTCACT TCTGCTCCG GTCAAAAGGA AGAGACTTTG 660

5 TCCACAGTGT GCAGGAGACT CACTCCACGC TGCTGGGCTC CTGGGACCCG TGGGAAGAAC 720  
 CGGAAGAGCG AGCCCCCTGTG GCCCCCTCCG TCCTTGCCCTC TGGGTACCTT GAGCTGCCCA 780  
 CACCCAGGAG AGAGGTCCAG TCTGAAAGTG CCCAGGAGCC AGGAGCCAGG GATGTGGAGG 840  
 CGCAGCTGCG GCGGCTGCAG GAGGAGAGGA CGTGCAAGGT GTGCTTGAC CGCGCCGTGT 900  
 CCATGCTCTT TGTGCCGTGC GGCCACCTGG TCTGTGCTGA GTGTGCCCCC GGCTGCGAGC 960  
 TGTGCCCAT CTGCAGAGCC CCGTCCGCA GCGCGTGGC CACCTTCCTG TCCTAGGCCA 1020  
 GGTGCCATGG CCGGCCAGGT GGGCTGCAG GTGGGCTCCC TGCCCCCTCT TGCTGTTCT 1080  
 GGACTGTGTT CTGGGCTGCG TGAGGATGGC AGAGCTGGTG TCCATCCAGC ACTGACCAGC 1140  
 CTTGATTCCC CGACCAACGC CCAGGGTGA GAAGGAGGCC CTTGCTTGGC GTGGGGGATG 1200  
 10 GCTTAACGTG ACCTGTTTGG ATGCTTCTGA ATAGAAATAA AGTGGGTTTT CCCTGGAGGT 1260  
 ACCCAGCA 1268

Seq ID NO: 183 DNA Sequence  
 Nucleic Acid Accession #: NM\_021020.1  
 Coding sequence: 112..1902

15 1 11 21 31 41 51  
 TGAGGGCTTT GCTATGACCT CAGTCCCTC ACAGGAGCC GACTGCCCT TGCTGCCACA 60  
 GCCTTTCCAA GACCTTGCCC GGCCTGCCC CATCTCAGC CCGAGTCA CAGTGGGAGC 120  
 20 GTCACTAGCC TCATCTCCG CCACAGCTTC CACAGCAAGC ACTGCCGCG TTGCGAGTAC 180  
 AAGCTGCGCA AGTCTCCCA CCTCAAGAAG CTCAAACGGT ATTCGAGCG GCTGCTGAGG 240  
 TTTGGCTCTT CCCAGGACTC CGGTCAAGGC AAGTCCAGT CCAAAATGGG CAAGAGCGAA 300  
 GACTCTCTCT ACATCAAGGT CAGCCAGAAA GCGCGGGCT CCACTACCC AGATTACACG 360  
 GCACTGTCCA GCGGGGATT AGGGGGCCAG GCTGGGGTGG ACTTTGACCC TGCCACACCC 420  
 25 CCCAGCTCA TGCCCTTCTC CAATCAGCTA GAATGGGCT CCGAGAGGG TGCACTGAGG 480  
 CCCACAGCTT TCAAGCTGT GCTGCCACGG TCAGGAGCCA TCCTGCACTC CTCGCCGAG 540  
 AGTGCCAGCT ACCAGCTGCA CCGCCGCCCT CCAGCAAGC CCAAGGAGCA GGAGCTGAAG 600  
 CCTGGCTGCT GCTCTGGGC GCTGTCAAGC TCCTGGGGA ACTCATGTC CAGCTGCC 660  
 30 ACACACAGCA CCAGCAGCAG CTACCAAGCT GACCCGCTG TCACACCCGT GGGACCCACA 720  
 AGCCGTTTGG GGGGCTCCG CCACACATC ACCCAGGCA TGCTCTCCA GGACAGCAAC 780  
 ATGATGAGCC TGAAGGCTCT GTCTTCTCC GACCGAGGTA GCAAGCTGG CCACTCGAAC 840  
 AAGGCAGACA AGGCCCTCT GTGTGCTCC TCCCTCATCT CCAAGGACA GTGCAAGATC 900  
 CAGGAGCTGG AGCAAGAGCT GTTGGAGAGG GAGGGGCGCC TCAGAAAGCT GCAGCGCAGC 960  
 35 TTTGAGGAGA AGGAGCTTGC CTCAGCCTG GCCTACGAG AGCGGCGCG GCGCTGCAAG 1020  
 GAGCAGCTGG AGGGCCCGGA GCGCAAGGC GCGCAAGC TCAAGCAGGC CTCGAGAGAG 1080  
 AGCCAGCGCG CCGACAGGT CCGTCACTG CAGGTACTG AGCTTCAGCA GGAGAGCGG 1140  
 CAGCTCCGCG AGGAGCTGGA GAGCTCATG AAGGAGCAG ACCTGCTGA GACCAAGCTC 1200  
 AGGTCCTACG AGAGGGAGAA GACCAAGCTC GCGCCGCGC TGGAGGAGC CCAGTGGAG 1260  
 40 GTGTGCCAGA AGTCAGGCGA GATCTCCCTC CTGAAGCAG AGCTGAAGGA GTCCACAGCG 1320  
 GAGTGAAAGC CCAAGGCTAG CGAGATCTTG GGTCTCAAG CACAGCTGA GGACACGCG 1380  
 GGCAGAGTGG AGGGCCTGGA GCTGAGGACC CAGGACCTG AGGGCGCCT GCGCAACAG 1440  
 GGCCTGGAGC TGGAGCTCTG TGAGAAAGAG CTCAGGCGCA AGAAGAACGA GCGGAGCTG 1500  
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 45 CTGGCCGCGC ACATGGGGCC GCGCACCTTC CCGGAGAGT TCCTGCTCT CAGCGGGAG 1620  
 CTGAGGAGCG TGCGGGCGGA GCTGCGGAG GAGCGGCAAG GCCATGACCA GATGTCTCTG 1680  
 GGCTTCCAGC ATGAGCGGCT GGTGTGGAAG GAGGAGAAG AGAAGGTGAT TCAGTACCA 1740  
 AAACAGCTGC AGCAGAGCTA CGTGCCATG TACCAGCGA ACCAGCGCT GGAGAAGGCC 1800  
 CTGCAGCAGC TGCCACGTGG GGACAGCGCC GGGGAGCCT TGGAGGTGA CCTGGAAGGG 1860  
 50 GCTGTAAGC CCTACGAGGA CATCATAGCC ACTGAGATCT GAGGGGCTG CTCGGAAGCG 1920  
 GAGTCTGGGG ACCTGGCACT GGGAGGCAAG GCTCTCCGT GCATCCCCC TGCTCAGCAA 1980  
 TTGAGACCCC TCTAGAGAGC GCGACTCCCT GGGACACAGA CCGAGGACC CCGAGGGGAG 2040  
 GGCAGGATGG CCTTCTCTC CTTCTCTGAT GTCCAGCTG TCACAGGCC TGCAAGCCAC 2100  
 CAGACCTTGA GCGCTGACTC CTCTGGCTTT CCGAGGAGT GGGTCCAGG GTCTGTCTG 2160  
 TTTGGTTAAG GGCTCCCTAA ACTTTGGCTT TGTTCGAAA TAGATATCT CTCCCCCTC 2220  
 55 TCCAGGAGCG GTGGCCACAG CAAGAACAG GCGTCCCTC CGCTTCTCAT CCCAACCTCT 2280  
 TTTTCTCTCT GGACACATTG GAATGCCCTG GAAATAGAAA GAAGCATAT ATGACAGAA 2340  
 GCCTTGGAAC CAGCCCCATC AGAACCTGAG CTATTTTCT CTGGCCGCG AGGTGTAGGG 2400  
 GTGGAATGAG CGCGGGGAA GCTGGCTTTG AAACCTCAGG GCTGTCCAG CCGCGGCAAG 2460  
 60 CCACAGGAAG GGGGGAGAG ACAGGCAGCC CAGCAGTGT GAGACCTGC CACAGCCAGA 2520  
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 GCGCCAGCCC CTGTTTACTG GTTCTTGCAA ATGGGAGCTG AGCAGCCTCT GGACAGCCAG 2640  
 TGACCTTTGA CCTCGGTGAC CACTCTTCT TAAGCCATAG ACCCTGAGGC CCTGGGCTGG 2700  
 GTGCTGGGAA GGGAGGGTTG AAACCAAGCT GAACAGAGG GTGTGCTTT CCAGGCAACC 2760  
 65 TCCAGGAGCC TCCCATCTG TCCAGCTGG GCGAGAGCT GGGAGTCCCT ACCTGCTTCA 2820  
 CGTTGGCCGG CGGCTACTCT GGAATGTTT TCCTTCCCA GAATCAAGCT TTTGCTGAT 2880  
 CCAGAGAGCG CCATATCACT AAGATGGCAT ATATGTGAT TGGGCATTTT CCTCTCTGC 2940  
 CTACAGCCAG GTTTAGCGCG AAACCTTTCC CCTTAGCAC CTTAGGGCT GAGTCTGGG 3000  
 TTTCTAGAGG TCAGGACGGC TCCTCAGAGC GCGAGGAAGC CAGAGCCCA AGCAGGACGA 3060  
 70 AAAAGAGGCA TACACACAGC AGTGTGAATA GCCTGGCCAC CAGCCATCT CCTTCACT 3120  
 CAAGACCCCC ATTTGTCCCA GACTAAAGGA TCAGAGAGC AGCTCCCTTT CTCAGGAGCT 3180  
 TGGGCACTGC CCCAGGGAGT CCAGGGTTTC TCTGCAGATG TGCGGAGCGG GAGGCGGTGG 3240  
 TATAGAGAGA TAAAGGTGG AGTTTCTCTG TGTGTTGTT CAGGGATTTT ATTTTAAAT 3300  
 TTATGAGACA GGGTCTTGCT CTGTCCCCA GGTGGAGTG CAGTGGCATG ATCATAGCTC 3360  
 75 ACTGCAGCCT CATACTCTG GGCCTAAGCA ATCTCTCTG CTCAGCCTTC CACTAGCTG 3420  
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 TCTGTTTGT TTGCCAAAGC TGGTCTCAA CTTGTGGCT CAAGCAATCC ACCTGCTTGG 3540  
 GCGCTCCCAA GTGCTGAGAT TGCAATGTG AGCCACCGT CCTGGCCAGA TTTTCTTTT 3600  
 80 ATTCTCTTCT CTCTTCTTT TTTGCTTCT TGTCTTTCA GAAGCAAGCC AGACCTAGCA 3660  
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 GAGTCCAAGG CCACTCCCA TTTCTGCTC GCTCAGCTG GCGCTTGA GACCCCGAGG 3840  
 TAGGGGTGG GAGATGCTTC TCTCTTGGC CCGCGCTC ATGGGCTCTA GCGCTTCTCT 3900  
 GAGTCCGGG TGAGGCCAGA GTCACTTTT CTGTGGCTG CTCTACCTTC CTGTCTCTGA 3960  
 GGTAAACCG TGCCCATCTT GGCATCTCA AACGACAGG GAGCTTTTCT GGAATTCAA 4020

5  
10  
15  
20  
25

ACCATGCTCT TTAGTCCCAA GCTAGGCTTA AACCTGGAAT CTACAAGCCA AAAGTCCCTC 4080  
CCTGCTGAG GGCAGTACCC TCCATTGGGC ACAGTCCAGA CCCAAGTCAA AGATGCCCCA 4140  
TTCCTTGGGC CTCAGCCCTC AGTTCCTTCA TTCCACCAG GCCGTGCCCT GTTTGAGTTT 4200  
TTCCTCCAG TGAGAGTCCC CCACGGAGAC AGAGGAAAGG GCTGCTCTCC CCTCCCCAGG 4260  
CTGGAGACCC CCCCACACTC CAGGAAAGAG CAGTCAGAGT CCAGTCTCTT GCCTCAGACG 4320  
TTGCTTGAGA AGAAGTGGCT GCCACACCCA GGGGAAGGCC CTGAGGCGGA GGCTGTGCTC 4380  
CGCCATGGTG TCCCGGTACC TTCCATACAC AGAGGAGTGC AGCCTTCTCC ATATCTCCAT 4440  
GGCCCTGTCC CAGGCGCGCC CAGATGTGTC CCCCCAGGC CTGTCTCTAC GTCCAAAGTG 4500  
GCAGATGTCT TCCCTGGGCT GCCACAGCC CCGCCCCAG AGTGGCCAC GGTGGCACTA 4560  
GAATGCAAGT ATCCTGGGAC CTTGCAACCT CACCTTCTCT TGGGTGTTCT TTCTGCGCT 4620  
GTCCAAAGCC GCCTCCTACT TTCTTGAGCC ATGCCAGATT CTGCTCTCTT GGAAAGAGGC 4680  
TCTGGACAGC AGAAGCCTCC AAGCACAGAG CCTGGCCCCA GGCCCCAGAC AGGGTGGGT 4740  
TCTGCTCTT CCTCTGGGC ACGCTGCTG GCGACCCAC TGACCCACTC GGATGGACCA 4800  
ACCTGCTCTG TCCCAAAAGG ACGCTGCTG GAGAGAGCAG CACTCGCAT CACCTCACCA 4860  
AGGATCGGAC TCTGCCCTGC GACCTGGGAA CGACTGGACT GTCAAGGGT TCCCTCTAG 4920  
CTCTCCAGT GAACTCTGC CAGGCACACA CAGCCCTAT AGCACTGAGC TCACATGGG 4980  
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CCAGTCTGGG CCATCTCTTA GGTGAGACAG TTCCCGAAG CTAAGCCAGG CTTGGCTGGA 5100  
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GGTGGCTCTT GTGCTGGCC TGCAGGCAGA GCTGGAGCCC CCAGCAGAGG CAGGCTGGGA 5280  
CGGACACAGA TCTGGAAGAT GTACATAGTT ATTTTCTCT TTGTGGTTTC TTGTTGGTT 5340  
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Seq ID NO: 184 DNA Sequence  
Nucleic Acid Accession #: AF265577  
Coding sequence: 1..2193

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Seq ID NO: 185 DNA Sequence  
Nucleic Acid Accession #: NM\_031945.1  
Coding sequence: 65..1112

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Seq ID NO: 186 DNA Sequence  
Nucleic Acid Accession #: AF475085.1  
Coding sequence: 54..1715

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GGAAAAATA ATGTGTAGCT GAGTTGGAAC ACTGTGGATA TTCTGAGATC AGATGTAGTA 1800  
TGTTTGGAGA CTGTTATTTT GAGCTAATTG AGACCTATAA TTCACCAATA ACTGTTTATA 1860  
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Seq ID NO: 187 DNA Sequence  
Nucleic Acid Accession #: NM\_000114.1  
Coding sequence: 194..910

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CCCCACTGCA GCCAGATCTG AGGGGAGCTG TGAAGAGACT GTGGCTGCT CTGGCGAGGA 360  
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Seq ID NO: 188 DNA Sequence  
Nucleic Acid Accession #: NM\_005356.2  
Coding sequence: 52..1581

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Seq ID NO: 189 DNA Sequence  
Nucleic Acid Accession #: NM\_014654.1  
Coding sequence: 1504..2658

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	CACATGTACC	CAGACTTCAT	TCTTCTCTGC	ATCTTCCCCC	AAGAAACAGC	TTCTGAGGG	3300
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	GCACAGACAC	CATTGCCAC	ACTATCACCA	TATTTTCACT	CAGTCACACA	CAAGACAAAA	3420
35	GCATGCAATG	ACAAAACCAT	ACCAATCCT	GACCGCCAG	CCAATCAAGA	CATATCACAG	3480
	AACACACGGG	TCCTTCCAAAG	AATGTTTATC	CTCATGCATC	ACTTACACAC	CCCCAGACAC	3540
	GTACTGCAAT	GCAAGTCAC	AGTCACTGTC	ACATGACAGT	GACAGTGTGG	CCTCTCTCTA	3600
	CCCCAAATCT	ACCCACACTC	TGGCACCA	CACATTGTCT	CCAGCTTCA	GGCTTACTGG	3660
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	GCATTGCATG	CAGGTGGGCC	TGGCTTCAAC	CCTACCTGCT	TCTCCCCAC	CGCAGCTGGC	3960
	AGAGGGGAGG	GTTTGGGGCC	AGACCCCCAC	TAGCTGGGAG	CCTGGGGCT	CCTCTAAGGC	4020
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	TTGAGCTAGG	GGGCTGACTC	TGCCCTCCAG	GACACAAGTC	TCCAAAGTGC	CTGTGAGGGC	4200
	GGGCCCCCG	CACCTCTGTC	CCTCTGCCCT	GCAGGCCAAC	CTCAGCCAC	CTGCCCAGAG	4260
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25 AGGTCACTTT GCTTCGGGCA GGGTGGAAAT AATTGCTGAT TGCTCTTTC TCCCAACGCT 1140
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60 CATTCAGCT AGAGATGAAG TGGAAAGTTT TCTGCAAGAT ACGTTTCTCT AGCAACTAGA 1020
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65 CACGCTGCC CCTCCATTTT CTCTCCAACT TGGAACTCTG ACATTGAACC CAGTTGCTCA 1320
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Coding sequence: 73..351

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ACTTAGGAGT CAGGTCTCAG TGATAAAGCG TGACCCGTGC AGCCCGCCAT GCGCGTGTAG 660  
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Coding sequence: 18..455

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TCTTCTGTCT CATGTGGCTC TATCTTTTAA AACCTCAAG CCCTCCACTG TCCTAAGATA 900  
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40 AAGCTCTGAA GTCCCTGCAG GTGGAGGCCA TGCTGTCTTT AAACCTAGTT GCATCCCTGG 1020  
TGCCCAAGGC AACACAGAA CCAAGAAGGA GCTCCATAAA TCCTTCTTGG GTGAAGCCTA 1080  
GACAAGCCCG CCAGGTCTTG TGGCTCCAGG CACCAGAGCC TTGAGTACTT TCTCCTGCCT 1140  
GCTGCAATGG GCTCAGGGTG AATTACAAGG GGCTACTGAA TGGCTATTAC TTTATCAGG 1200  
ACTGATCCCC ACCTCTCAG GGTCAAGGGG CTACTTCTG GAAGCTCTCC CAGGCTGACT 1260  
45 CCTTCTCCCT GACTGCAAGG GCTCACTCCC TCCTCCAAGC TCCCAATG CTTCATGGCT 1320  
CTGCCCTTAA CTTAGCTTGG CTTAGAGTGG CAATGGAAC TTCTCTGATC TCCCCAACT 1380  
AGACTGGAGC CCGGAGGGA TGGAGACCAT GTCTGTGCA TCTCTGTTTC CCTGTTTTC 1440  
CCACATACTA GGTGTCTCAAT TCATGCTGTG GAATGGGTG AGCCATAAT GGATACACAG 1500  
AGGTGTCAGC AGATGGTGTG GGTACCTCAC CCAGATATCA TCCAGGCCCA AGGCCCTCT 1560  
50 CCTGAGTGA GGCACAGGTG TGGCAGCCAA CTGCTCCAAT CTGCTCTCT CCCCATAATA 1620  
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CTGCTCACTA TGGCCAGGAG AGTGACACCA TGGAGGTGAC AATTGCCAGC TCCCGCTGTG 1740  
CTGTGCAGGA TTGTCTGGGT TGAATGACAC TCTCAAATTT TTCTGGGAT CGGGCTGAGG 1800  
CCAGGCTCTC CTGGAACCA CTTCTCTGCT TGGTCTGACC CTTTGGCTTA TCCAGTTTTC 1860  
55 CTGGTTCCTT CACAGTTTTC TCCAGAAAGT ACTCCCTCAG TAAAGCATTT GCACAAGAAT 1920  
CCTTGTCTCA GGTCTGTCTT CTAAGGAAGG AGACTGAAGA GGGACAACCT TTTCTATGA 1980  
GGACTCCCAA TCTGCCATTT GTGTGTGGCT AGCTGTTTCC AGCCAGGGGG CTGAGGCACC 2040  
TGCACTCACC CACACTCTGG GCCTGTGGCA CCACTGTGTC CTCAGCTGAC TGAGCAGTTT 2100  
60 TGAGATGTGG TGACTCATGT GAAGTGGTGT CATAGGAATG AAGGACTGTG GCGCTGGGT 2160  
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TGTGGGGGAA CAGGCTAGGG AAATCTCCAT ACCTTCTCAA TTTTGTGTG AACCTAAATC 2280  
TGCCATATAA AGATAAAGTC TAGGCCAGGC ATGGTGGCTC ATGGCTGTAA TCCCAACACT 2340  
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65 ATGGCAAAAC CTGCTCTCTA CTAAATAATC AAAAAATAGC CAGGCATCTG GGTGGGTGCC 2460  
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GTTTCAGTGA GCCAGATCG CGACACTGCA CTCCAGCTG GGCAACAGAG TGACACTCTG 2580  
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AAAAAATAAA AAAAAAATAA AAAAAAATAA AAAAAAATAA AAAAAAATAA AAAAAAATA 2700  
70 AAAAAAATAA AAAAAAATAA AAAAAAATAA AAAAAAATAA AAAAAAATAA AAAAAAATA 2740

Seq ID NO: 196 DNA Sequence  
Nucleic Acid Accession #: NM\_018833.1  
Coding sequence: 80..2041

1 11 21 31 41 51  
75 GAGGTGGGGA GAGACGGAGC GGACCTCAGC GCTGAAGCAG AAGTCCCCGG AGCTGCGGTG 60  
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GGTGGAGCGG GCTTACTGTG GGTGCTTCA GGGCCCTCTG GGGACTTTGC TTCTCTAAGG 180  
80 GCTGCCAGGA CTATGGCTGG AGGGGACCTT GCGGCTGGGA GGGCTGTGGG GGCTGCTAAT 240  
GCTAAGAGGG CTGCTGGGAT TTGTGGGGAC ACTGCTGCTC CCGCTCTGTC TGGCCACCCC 300  
CCTGACTGTC TCCCTGAGAG CCTGTGTCG GGGGGCTTCA GTGTCTCCCC CAGCCAGAGT 360  
CGCTTCAGCC CTTTGGAGCT GGTGCTGCTG GGGGTACGGG GCTGGGGGGC TCACTGTGTC 420  
ACTGTGGGCT GTTCTGAGCC CTCTGGAGC CCAGGAGAG GAGCAGGACC AGGTGAACAA 480  
CAAAGTCTTG ATGTGGAGGC TGCTGAAGCT CTCCAGGCGC GACCTGCTCT TCCTGTTGCT 540

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CGCCTTCCTC TTCCTTGCC TTGCTGTTT GGGTGAGACA TTAATCCCTC ACTATTCTGG 600  
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CTTCATGTGC CTCTTCCTT TTGGCAGCTC ACTGTCTGCA GGCTGCCGAG GAGGCTGCTT 720  
CACCTACACC ATGTCTCGAA TCAACTTGGG GATCCGGAG CAGCTTTTCT CCTCCTGCT 780  
GCGCCAGGAC CTGCTTTCT TCCAGGAGAC TAAGCAGGG GAGCTGAAT CACGGCTGAG 840  
CTCGGATACC ACCCTGATGA GTAACGTGGT TCCTTTAAAT GCCAATGTGC TCTTGGGAAG 900  
CCTGGTGAAA GTGGTGGGGC TGTATGGCTT CATGCTCAGC ATATCGCCTC GACTCACCT 960  
CCTTTCTCTG CTGCACATGC CCTTCACAA AGCAGCGGAG AAGGTGTACA ACACCCGCCA 1020  
TCAGGAAGTG CTTCGGGAGA TCCAGGATGC AGTGGCCAGG GCGGGGCGAG TGGTGGCGGA 1080  
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CTACCCAGGAG AGGTGGGGA GCTATGTGCA GACCTGGTA TACATATATG GGGATATGCT 1380  
CAGCAACGTG GAGCTGCGAG AGAAGGTTT CTCTACATG GACGACAGC CAATCTGCC 1440  
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CCTGCTCGAG AATCTGATC AGCCACAGG GGAAGAGGTG CTGCTGGATG AAAAGCCCAT 1680  
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GCTGTTCTCC GGTGCTGGA GGAACAACAT TGCTTATGG CTGCAGAGCT GGAAGATGA 1800  
TAAGGTGATG GGGCTGCCC AGGCTGCCCA CGCAGATGAC TTATCCAGG AATGAGCA 1860  
TGGAAATAC ACAGATGTAG GGGAGAAAGG AAGCCAGCTG GCTGCGGAG AGAAACAAG 1920  
TCTGGCAAT GCCCGGGCCC TTGTACGAGA CCGCGGGTCT CTATCCTGG ATGAGGCTAC 1980  
TAGTGCCCTA GATGTGAGT GCGAGCAGGC CAAAACCTT TGGAAATTC TGAATTTT 2040  
AATTTCAAT GATATTTCT GGAATTAAT AGTTCAATG AACGAATATG TGAACAAG 2100  
CATCACCAAC ATTTATTTT TCAGGATGAG GTGATGGACA AAACCATCAC AGGGAATTG 2160  
AGGCAATAG TACATATAA ACAATCTTC GGGTGAATCC ACCTATCCCA AAGTGTATC 2220  
AAAGAAGTG CTGCAGATTG GAGCCCAAG CCTTGGTTC CTGATTTCC AATGGAATC 2280  
TCACTAGGTG GGATCATGAG TTTGCTTGG ACACCCCAAA TTCTAATAT TTCTTTGT 2340  
TCTTACATCC TTTCCCTCT CCCAGGCCC TTCCCTCAT GTTACACCTC TTGCTGGTT 2400  
GAGAGCTCAA TCACCACTGA GAAAGAATTA AACCAATAT TTGAGCTGGC AAAATCTTA 2460  
GCTAGTACA ATTCCTCAA TTAACGTGA GCTCAAC 2497

Seq ID NO: 197 DNA Sequence  
Nucleic Acid Accession #: NM\_002416  
Coding sequence: 40-417

1 11 21 31 41 51  
1  
40 ATCCAATACA GGAGTGACTT GGAATCCAT TCTATCACTA TGAAGAAAAG TGGTGTCTT 60  
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AAGGGTGCT GTTCTGCAAT CAGCACCAC CAAGGGACTA TCCACCTACA ATCCTTGAAA 180  
GACCTTAAC AATTGCCCC AAGCCCTTCC TCGGAGAAAA TTGAAATCAT TGCTACACTG 240  
AAGAAATGAG TTCAACATG TCTAAACCCA GATTGAGCAG ATGTGAAGGA ACTGATTAAA 300  
AAGTGGGAGA AACAGGTCAG CCAAAAGAAA AAGCAAAAGA ATGGGAAAAA ACATCAAAAA 360  
AAGAAATTC TGAAGTTG AAAATCTCAA CGTCTCGTC AAAAGAGAC TACATAAGAG 420  
ACCATCTAC CAATAGTAT TCTGTGTTAA AATGTTCTA TTTTAATTAT ACCGCTATCA 480  
TTCAAAGGA GGATGGCATA TAATACAAAG GCTTATTAAT TTGACTAGAA AATTTAAAC 540  
ATTACTCTGA AATTGTAAT AAGTTAGAA AGTTGATTTT AAGAATCCAA ACGTTAAGAA 600  
TTGTTAAAGG CTATGATTGT CTTGTCTCT CTACACCCA CCAAGTGAAT TTCATCATGC 660  
TTAAGGCCAT GATTTTAGCA ATACCCATGT CTACACAGAT GTTCAACCAA CCACATCCCA 720  
CTCACAACAG CTGCGTGGAA GAGCAGCCCT AGGCTTCCAC GTACTGCAGC CTCAGAGAG 780  
TATCTGAGGC ACATGTCAGC AAGTCTAAG CCTGTTAGCA TGCTGGTGAG CCAAGCAGTT 840  
TGAATTTAG CTGAGCTCA CCAAGCTGCT GTGGCCATCA ACCTGTGTAT TTGAATCAGC 900  
CTACAGGCTC CACACAAAT GTGCTGAGA GATTGATGCT GATTGTTATT GGGTATCACC 960  
ACTGGAGATC ACCAGTGTGT GCTTTCAGA GCCTCCTTTC TGGCTTTGGA AGCCATGTGA 1020  
TTCCATCTTG CCGCTCAGG CTGACCACTT TATTTCTTTT TGTTCCCTT TGCTTCATT 1080  
AAGTCAGCTC TTCTCCATCC TACCACAATG CAGTGCTTTT CTCTCTCCA GTGCACCTGT 1140  
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CACATGGGTG AACACTCAAT GGTTAACATA TTCTGGGTG TTTATCCTAT CTCTCCAAAC 1380  
AGATTGTGAG CTCTTGAGG GCAAGAGCCA CAGTATATT CCTGTCTT TCCACAGTGC 1440  
CTAATAATAC TGTGGAACATA GGTTTAATA ATTTTAAAT TGATGTTGTT ATGGGAGGA 1500  
TGGCAACAG ACCATTGTCT CAGAGCAGGT GCTGGCTCTT TCCTGGCTAC TCCATGTTGG 1560  
CTAGCCTCTG GTAACCTCTT ACTTATTATC TTCAGGACAC TCACTACAGG GACCAGGGAT 1620  
GATGCAACAT CCTGTCTTTT TTATGACAGG ATGTTTGCTC AGCTCTCCA ACAATAAGAA 1680  
GCACGTGTA AAACACTTGC GGAATTTCTG GACTGTTTTT AAAAATATA CAGTTTACC 1740  
AAAATCATAT AATCTTACAA TGAAAAGGAC TTTATAGATC AGCCAGTGAC CAACCTTTTC 1800  
CCAACCATAC AAAAATTTCT TTTCCGAAG GAAAAGGCT TTCTCAATAA GCCTCAGCTT 1860  
TCTAAGATCT AACAGATAG CCACCGAGAT CCTTATCGAA ACTCATTTTA GGCAATATG 1920  
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AAAAATCTAA GTGTTTCATA AATTGAGAG TCTGTGAGCC ACTTACCTTG CATCTCACAG 2340  
GTAGACAGTA TATACTAAC AACCAAGAC TACATATTGT CACTGACACA CAGTTATAA 2400  
TCATTATCA TATATATACA TACATGATA CACTCTCAA GCAATAAAT TTCTACTTCA 2460  
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Seq ID NO: 198 DNA Sequence



Nucleic Acid Accession #: NM\_006533.1  
Coding sequence: 72...467

1 11 21 31 41 51  
5 AGGGAGAGAG GGAAGGGAGG AAATTGGAGA CCCAGCACC CCCTTGCTCA CTCTCTTGCT 60  
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CGGACCAGGA GTGACAGCAC CCTATCTCCA TGGCTGTGGC CCTTCAGGAC TACATGGCCC 240  
CGAGCTGCGG ATTCTTGACC ATTCACCGGG GCCAAGTGGT GTATGTCTTC TCCAAGCTGA 300  
10 AGGGCCCTGG GGGCTCTTTC TGGGGAGGCA GCGTTCAGGS AGATTACTAT GGAGATCTGG 360  
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GCAAGTCCA TGTGAAGACA GACAAATGGG ATTTCTACTG CCAGTGAGCT CAGCCTACCG 480  
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Seq ID NO: 199 Protein sequence  
Protein Accession #: NP\_002412.1

1 11 21 31 41 51  
20 MHSFPPLLLL LFWGVVSHSF PATLETQEQD VDLVQKYLEK YYNLKNDRGQ VEKRRNSGPV 60  
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YTPDLPRADV DHAIEKAPQL WSNVTPLTFT KVSEGGADIM ISFVRGDHRD NSPFDGPGGN 180  
LAHAFPGPGG IGGDAHFDED ERWTNNFREY NLHRVAHAEL GHSGLGSHST DIGALMYPST 240  
TFSGDVQLAQ DDIDGIAIY GRSQNPVQPI GPQTPKACDS KLTFDAITTI RGEVMPFKDR 300  
FYMRTNPFYP EVELNFISVF WPQLPNGLEA AYEFAADRDEV RFFKGNKYWA VQGNVNLHGY 360  
25 PKDIYSSFGF PRVVKHIDAA LSEENTGKTY FFWANKYWR DEYKRSMDPG YPKMIAHDFP 420  
GIGHKVDVAF MKDGFYFFH GTRQYKFDPK TKRILTQKA NSWFNCRKN

Seq ID NO: 200 Protein sequence  
Protein Accession #: NP\_002412.1

1 11 21 31 41 51  
30 MHSFPPLLLL LFWGVVSHSF PATLETQEQD VDLVQKYLEK YYNLKNDRGQ VEKRRNSGPV 60  
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YTPDLPRADV DHAIEKAPQL WSNVTPLTFT KVSEGGADIM ISFVRGDHRD NSPFDGPGGN 180  
35 LAHAFPGPGG IGGDAHFDED ERWTNNFREY NLHRVAHAEL GHSGLGSHST DIGALMYPST 240  
TFSGDVQLAQ DDIDGIAIY GRSQNPVQPI GPQTPKACDS KLTFDAITTI RGEVMPFKDR 300  
FYMRTNPFYP EVELNFISVF WPQLPNGLEA AYEFAADRDEV RFFKGNKYWA VQGNVNLHGY 360  
PKDIYSSFGF PRVVKHIDAA LSEENTGKTY FFWANKYWR DEYKRSMDPG YPKMIAHDFP 420  
40 GIGHKVDVAF MKDGFYFFH GTRQYKFDPK TKRILTQKA NSWFNCRKN

Seq ID NO: 201 Protein sequence  
Protein Accession #: NP\_002413

1 11 21 31 41 51  
45 MKSLPILLLL CVAVCSAYPL DGAARGEDTS MNLVQKYLEN YYDLEKDVQK FVRRKDSGPV 60  
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YTPDLPRADV DSAVEKALKV WEEVTPLTFS RLYEGEADIM ISFAVREHGD FYFPGPGNV 180  
LAHAYAPGPG INGDHFDDDD EQWTKDTTGT NLFLVAHAEL GHSGLGPHSA NTEALMYPPL 240  
50 HSLTDLTRFR LSQDDINGIQ SLYGPPPDSP ETPLVPTEPV PPEPGTPANC DPALSFDAVS 300  
TLRGEILIFK DRHFKRSLR KLEPELHLIS SFWPSLPSPGV DAAEYVTSKD LVFIFKGNQF 360  
WAIKRGNEVA GYPRGIHTLG FPPTVRKIDA AISDKENKNT YFFVEDKYWR FDEKRSMEP 420  
GFPKQIAEDF PGIDSKIDAV FEFPGFYFF TSSQLEFDP NAKKVTHTLK SNSWLNC

Seq ID NO: 202 Protein Sequence  
Protein Accession #: NP\_001845

1 11 21 31 41 51  
55 MEPWSSRWKT KRWLWDFVT TLALTFLFQA REVRGAAPVD VLKALDFHNS PEGISKTTCF 60  
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60 EHGIIQIGVE VGRSPVLFPE DHTGKPAED YPLFRTVNIA DGKMRHVAIS VEKKTVTMIV 180  
DCKIKTTKPL DRSERAIVDT NGITVFGTRI LDEEVFEGDI QQFLITGDPK AAYDYCEHYS 240  
PDCSSAPKA AQAEQFQIDE YAPEDIIEYD YEYGEAEYKE AESVTEGPTV TEETIAQTEA 300  
NIVDDFQEN YGTMEYQTE APRHVSQNE PNPVEEIFTE EYLTGEDVDS QRKNSDITLY 360  
65 ENKEIDGRDS DLLVDGDLGE YDFYKEYEYK DKPTSPNEE FPGVPFAETD ITETSINGHC 420  
AYGEKGQKGE PAVVEPGMLV EGPPPGPAGPA GIMGPPGLQG PTGPPGDPGD RGPPGRPLP 480  
GADGLPGPLG TMLMLPPRYG GDGSKGPTIS AQEAQAQAIL QQARIALRGP PGPMGLTGRP 540  
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GFDGLPGPLG DKGHRGERGP QGPPGPPGDD GMRGEDGEIG PRGLPGEAGP RGLLGPRTGP 660  
70 GAPQCPMAG VDGPPGPKGN MGPPGEPGPP GQGNPQPQG LPGPQGPIGP PGEKGPQKGP 720  
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75 GPPGPGVVG PQGPTGETGP IGERGYPGPP GPPGQGLPG AAGKEGAKGD PGPGISGKD 1020  
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80 GNPGPGEAG VGGPGRGERG KGEAGPPCAA GPPGAKGPPG DDGPKGNPGP VGFPDGP 1320  
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GLKGDGSGK EKGHPGLIGL IGPPGEGEK GDRGLPGTQG SPGAKGDDGI PGPAFLGPP 1500  
GPPGLPPGPG PKNGKSGTGP AQKGDGSLP GPPGPPGPPG EVIQPLPILS SKTRRRHTEG 1560  
MQADADDNLL DYSDGMEEIF GSLNSLRQDI EHKKFFPMGTQ TNPARTKDL QLSHPDFPDG 1620



EYWDIPNQC SGDSFKVYCN FTSGETCIY PDKKSEGVRI SSWPKEKPGS WPFSEFKRGKL 1680  
LSYLDVEGNS INVMQMTFLK LLTASARQNF TYHCHQSAAM YDVSSGSYDK ALRFLGSNDE 1740  
EMSYDNNPFI KTYLDGCTSR KGYEKTVEIE NTPKIDQVPI VDMVISDFGO QNKFPGFEVG 1800  
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Seq ID NO: 203 Protein sequence  
Protein Accession #: XP\_057014

1 11 21 31 41 51  
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GKIAECTFTK MRNSALAVL FSGSLRLKCR NACCQRWYFT FNGAECSGPL PIEAITLIDQ 180  
GSPENSTIN IHRITSSVEGL CEGIGAGLVD VAIWVGTCSD YPKGDASTGW NSVSRITIEE 240  
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Seq ID NO: 204 Protein sequence  
Protein Accession #: Eos sequence

1 11 21 31 41 51  
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SRQYTVRYRE KGLARMDYK QIANRRVLIE NLIPDTVYEF AVRISQGERD GKWSTSVFQR 120  
TPESAPTTAP ENLAVVWVNG KPTVVAASWD ALPETEGKVK VCLLDLTGLPS VSSFPQSAKS 180  
PQNTFFHTPR LSNHLQSPS PILETLLLPW MWCSLGNAI FSKSGPQTGE AWDLTGPKPSL 240  
SLCQCECSCST QKDPSCILAYL IDIQTKQVWK DPQLEGSVFG PCFLFYFLTF MLDIGGFSFI 300  
MCYEDPVSSL TGNLSKSVAA SKADVQONTE DNGKPEKPEP SSPSPRAPAS SOHSPVPASP 360  
QGRNAKDLIL DLKNIKILANG GAPRKQLRA KKAELDLOQ TEITGEEELG SREDSPMSPS 420  
DTQDQKRTL RPSRHGHSVV APGRTAVRAR MPALPRREGV DKPGFSLATQ PRPGAPPSAS 480  
ASPAHASTGT GTSRHPSLFA SLNDNDLVDS DEDERAVGSL HPKGAFAQPR PALSPSRQSP 540  
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SPLSKGGKDG EDAPATNSNA PSRSTHSSSV SSHLSSRTQV SEGAEASDGE SHGDGREDG 660  
GRQAEATAQT LRARPASGHF HLLRHKPFPA NGRSPSRFSI GRGPRLQPS SPQSTVPSRA 720  
HPRVPSHSDS HPKLSGSHG DEDEKPLPA TVVNDHVPSS SRQPIRGWE DLRRSPQGA 780  
SLHREKPIPE NPKSTGADTH PQGYSSSLAS KAQDVQOSTD ADTEGHSPIKA QPGSTDRHAS 840  
PARPPAARSQ QHPSVPRRMT PGRAPQOPP PPVATSQHHP GPQSRDAGRS PSQPRLSLTQ 900  
AGRPRPTSQG RSHSSSDPYT ASSRGMLPTA LQNDQEDAQG SYDDDDSTEVE AQDVRAPAHA 960  
ARAKEAAAL PKHQQVESPT GAGAGGDHRS QRGHAAAPAR PSRPGQPSR ARVPSRAAPG 1020  
KSEPPSKRPL SSKSQSVSA EDEEEDAGF FKGGKEDLLS SSVKWPSSS TPRGGKADG 1080  
SLAKEEREP AIALAPRGSGL APVKRPLPPP PGSSPRASHV PSRPPPSRAA TVSPVAGTHP 1140  
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TPLPTTPTPT PTTATTMQPT TTTTPTPTTT PRPTTATTTR TTTTRPTTTV RTTTRTTTT 1380  
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DEDEYEPETSR PPTTTEPSTT ATTPRVIPEE GAISFPPEE FDLGRKKRF APYVTVLND 1500  
PSAPCSLDTA LDHFQVDSL EIIIPNDLKKK DLPPQHAPRN ITVVAVECH SFVIVDWDKA 1560  
TPGDLVTGYL VYSASYEDFI RNKFPSTQSS VTHLPIDNLK PNTRYFKVQ AQNPNGYGP 1620  
SPSVSVFTES DNPLLVVRFP GGELSGSHSL SNMIPATRTA MDGNN

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Seq ID NO: 205 Protein Sequence  
Protein Accession #: NP\_055059

1 11 21 31 41 51  
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PVRTDAQRL VSHVVSATS RAGVRARRAA PVRTPSFPG NEEEPQSHLF YNVTVFGRDL 120  
HLRLRNARL VAPGATMEW GEKGTTRVEP LIGSCLYVD VAGLAEESSV ALSNCDLAG 180  
LIRMEEEFF IEPLKGLAA QEAEGGRVHV VYRRPTSPS LGGPALDGT ASLDSLSLS 240  
RALGVLEEA NSSRRARRH AADDYNIIEV LIGVDDSVQ PHGKEHVQY LLTLMNINE 300  
IYHDESLGAH INVVLVRIIL LSYGKMSLI EIGNPSQSL NVCRAWYLOO KPDTGHDYH 360  
DHAIFLTRQD FGPSGMOGYA PVTGMCHPVR SCTLNHEDGP SSAFVVAHST GHVLMGHDG 420  
QGNRCQDEVR LGSIMAPLVQ AAFHRFHWSR CSQQLSRYL HSYDCLDDP FAHDWPAIPQ 480  
LPGLHYSME QCRDFDGLGY MACTAFRTFD PCKQLWCSHP DNPYFCKTKK GPPLDGTNCA 540  
PGKHCFKGC IWLTPDILKR DCSMGASPF GCSRTCTGT VKFRTRQCDN PHPANGRTCT 600  
SGLAYDQLC SRQDCPDLSA DFREEQCRQM DLYFENGDAQ HMLPHEHID AKERCHLYCE 660  
SRETGEVVM KRMVHDGTRC SYKDAFSLCV RGDCKRVGCD GVIGSSKQED KCGVCGGDS 720  
HCKVVKGTFT RSPKHGYIK MFEIPAGARK LLIQEVDATS HHLAVKNLET GKPIWNEED 780  
VDASSKTFIA MGVEWEYRDE DGRETLQTMG PLHGTITVLV IPVGDTRVSL TYKMIHEDS 840  
LNVDDNNVLE EDSVYVWAL KKWSPCSKPC GGGSQPTKYG CRRRLDHKMV HRGFAALSK 900  
PKAIRACNP QECSPVWVT GEWEPCSQTC GRTGMQVRV RCIQPLHNT TRSVHAKHCN 960  
DARPESSRAC SRELCPGRWR AGPWSCSVT CGNGTQRPV PCRTADDSFG IQQEERPETA 1020  
RTRCLGPCPR NISDPKSKSY VVOWLSRPPD DSPIRKISSK GHCOGDKSIF CRMEVLSRYC 1080  
SIFCYNKLSC KSCNLYNMLT NVEGRIEPPP GKHNDIDVFM PTLVPVTVM EVRPSSTPL 1140  
EVLNASSTN ATEDHPETNA VDEPKIHGL EDEVQPPNLI PRRPSPYEKT RNQRIQELID 1200  
EMRKKELGK F 1211

75

Seq ID NO: 206 Protein sequence  
Protein Accession #: NP\_076927

1 11 21 31 41 51  
NGENDPPAVE APFSFRSLFG LDDLKISPA PDADAVAAQI LSLPLKFFP IIVIGIILI 60  
LALALGLGIH FDCSGKYCR SSKCIELIA RCDGVSDCKD GEDEYRCVRV GGQNAVLFV 120  
TAASWKTCS DDMKHYANV ACAQLGFPSY VSDNLRVSS LEGQFREEF SIDHLLPDK 180  
VTALHHSYV RCGCASGHV TLQCTACGHR RGYSSRIVG NMSLLSQWPM QASLQFQGYH 240  
LCGGSVITPL WIITAACHV DLYLPKSWI QVGLVSLDN PAPSHLVEKI VYHSKYKPKR 300  
LGNDIALMKL AGPLTFNEMI QPVCLPNSEE NFPDGVKVCNT SGWGATEDGG DASPLVNHAA 360

	VPLISNKICN	HRDVYGGIIS	PSMCAGYLT	GGVDSQGDGS	GGPLVCQERR	LHKLVGATSF	420
	GIGCAEVNKP	GVYTRVTSFL	DMIEHQMERD	LKT			
5	Seq ID NO: 207 Protein Sequence						
	Protein Accession #: CAC03433.2						
	1	11	21	31	41	51	
	MLSSDTFTFA	SWELVVRVDH	PNEEQKQDVT	LRVSGDLHVG	GVMLKLVQEI	NISQDMSDFA	60
	LMWEQKHICWL	LKTHMTLDKY	GVQADAKLLP	TPQHKMLRLR	LPNLKMLRLR	VSFSAVVFKA	120
10	VSDICKILNI	RRSEELSLK	PSGDYFKKKK	KKDKMKEPI	IEDILANLESS	PTASGSSVSP	180
	GLYSKNTMPI	YDFINGTPAS	STMTWFSDSP	LTEQNCISLA	FSQPPQSPEA	LADMYQPRSL	240
	VDKAKLIAAGW	LQSSRLMEQ	GIQEDBQLLL	RPKYYSFDDL	NPKYDAVRIN	QLYEQARWAI	300
	LLEEIDCTEE	EMLIPALQY	HISKLSLSAE	TQDFAGESEV	DEIEAALSNI	EVTLEGGKAD	360
15	SLLEDITDIP	KLADNLKLPK	PKLLPKAPK	QYWFIFKQTS	IAYFKNKELE	QGEPELKLNL	420
	RCCEVVDVNV	VAGRKFGIKL	LIPVADGME	MYLRCDHENQ	YAQWMAACHL	ASKGKTHADS	480
	SYQPEVLNLL	SFLRMQWRNS	ASQVASSLEN	MDNPECFVS	PRCAKHKSCK	QLAARILEAH	540
	QNVAGMPLVE	AKLRFIQAMQ	SLPEFGILTY	LVRFKGSKDD	DILGVSYNRL	IKIDAATGIP	600
20	VTTWRFTNIK	QMNVNMETRO	VVIEFDQNVF	TAFTCLSDAC	KIVHEYIGGY	IFLSTRSKDQ	660
	NETLDEDLPH	KLTGGQD					677
	Seq ID NO: 208 Protein Sequence						
	Protein Accession #: NP_114433.1						
	1	11	21	31	41	51	
25	MASRSMRLLL	LLSCLARTGV	LGDIIMRPSK	APGWFYHKSN	CYGYFKLRN	WSDAELECQS	60
	YNGGAHLASI	LSLKEASTIA	EYISGYQRSQ	PINIGLHDPQ	KRQQWQWIDG	AMYLRSWSG	120
	KSMGNGKICA	EMSSNNFLT	WSSNECNKQK	HPLCKYRP			158
	Seq ID NO: 209 Protein Sequence						
	Protein Accession #: XP_051860.2						
	1	11	21	31	41	51	
30	MGAACRQDFL	FKAMLTISWL	TLTCFPGATS	TVAAGCPDQS	PELQPMNPGH	DQDHHVHIQ	60
	GKTLALLTSSA	TVYSIHISEG	GKLVIKHDE	PIVLRTRHIL	IDNGGELHAG	SALCPFGQNF	120
35	TIILYGRADE	GIQDPDYYGL	KYIGVGKGA	LELHQKKLS	WTLNKTLLP	GGMAEGGYFF	180
	ERSWGHGRVI	VHIIDPKSGT	VHSDFRFDY	RSKKESERLV	QYLVAVDGR	ILSVAVNDEG	240
	SRNLDDMARK	AMTKLGSXHF	LHLGPRHPWS	FLTVKGNPSS	SVEDHIEYHG	HRGSAARVF	300
	KLFTQTEGVE	FNVLSSEMV	QDVETWEPD	HDKVSQTKGG	EKISDLWKAH	PGKICNRPID	360
40	IQATTMDGVN	LSTEIVYKKG	QDYRFACYDR	GRACRSYRVR	FLCGKPVPRK	LTVITIDTNV	420
	STILNLNDNV	QSMKPGDTLV	IASTDYSMYQ	AEEFQVLPCR	SCAPNQVKA	GKPMYLHIGE	480
	EIDGVDMRAE	VGLLSRNIIV	MGEMEDKCYR	YRNHICNFFD	FDTFGHIFK	ALGFKAAHLE	540
	GTGLKHMGGQ	LVGQYPIHFH	LAGDVEDERG	YDPPYIIRDL	SIHHTFSRCV	TVHGSNGLLI	600
	KDVVGVNSLG	HCFPTEDGPE	ERNTFDHCLG	LLVKSGLTLL	SDRDSKMKCM	ITEDSYPGYI	660
45	PKPRQDCNAV	STFMNANPNH	NLINCAGAS	EETGFWFIFH	HVPTGPSVGM	YSPGYSEHIP	720
	LGKFPYNNRAH	SMYRAGIID	NGVKTTEASA	KDKRPFSLII	SARYSPHQDA	DPLKPREPAI	780
	IRHFIAYKNQ	DHGAWLRGGD	VMLDSRFAD	NGIGLTLASG	GTFFYDDGSK	QEIKNSLPVG	840
	ESGNVGTGM	DNRIWPGGL	DHSGRTPIG	QNFPPIRGIQL	YDGPINIQNC	TFRKFVALEG	900
	RHTSALAFRL	NNAQSCPHN	MVTGIAFEDV	PITSRVFPGE	PGWPNQLDM	DGDKTSVFHD	960
50	VDGVSSEYPG	SYLTNDNWL	VRHPDCINVP	DWRGAICSGC	YAQMYIQAYK	TSNLRMKIHK	1020
	IDFFSHPLYL	EGALTRSTHY	QYQPVVTLQ	KGYTIHMDQT	APAEALAIHLI	NFNKGDWIRV	1080
	GLCYPRGTTF	SILSDVNRLL	LKQTSKTVGF	VRTLQMDKVE	QSYPGSRSHY	WDEDSGLLFL	1140
	KLKAKNEREK	FAFCSMKGCE	RIKIKALIPK	NAGVSDCTAT	AYPKPTERAV	VDVPMKKPLF	1200
	GSQILTKDHF	LEVKNESKQ	HFFHLWDFDA	YIEVDGKKYP	SSEDGIQVVV	IDGNQGRVVS	1260
55	HTSFNRSILQ	GIPMQLFNYY	ATIPDNSIVL	MASKGRYVSR	GPWTRVLEKL	GADRLKLKE	1320
	QMAVGVFGKS	FRPIWVTLDT	EDHKAKIPQV	VPIPVVKKKK	L		1361
	Seq ID NO: 210 Protein Sequence						
	Protein Accession #: NP_036244.1						
	1	11	21	31	41	51	
60	MSQVKSYSY	DAPSDFINFS	SLDDGEGTON	IDSWFEKAN	LENKLLGKNG	TGGLFQCKTP	60
	LRKANLQAI	VTPKLPVDNT	YYKEAEKENL	VEQSIIPSNAC	SSLEVEAAIS	RKTAPQPRR	120
	SLRLSAQKDL	EQKEKHVVKM	KAKRCATPVI	IDEILPSKMM	KVSNNKKKPE	EEGSAHQDTA	180
65	EKNASSPEKA	KGRHTVPCMP	PAKQKFLKST	EEQELESKMK	MQQEVVEHRK	KNEEFKKLAL	240
	AGIGQPVKKS	VSGVTKSVDF	HFRTERIRK	HPKMQEEYKE	VNFTSELAKH	PSSPARVTKG	300
	CTIVKPFNLS	QGKRTFDDET	VSTYVPLAQQ	VEDFHKRTPN	RYHLRSKKDD	INLLPSKSSV	360
	TKICRDQPTP	VLQTKHARA	VTCKSTAELE	AEELEKLOQY	KFKARELDPR	ILEGGPILPK	420
	KPPVKPPTP	IGFDLIEKR	IQERESKKKT	EDEHFEFHSR	PCPTKILEDV	VGVPEKKVLP	480
70	ITVPKSPAPA	LKNRIRMPK	EDEEEDPVPV	IKAQPVPHYG	VPFKPIPEA	RTVEICPFSF	540
	DSRDKERQLQ	KEKKIKELQK	GEVPKFKALP	LPHFDITNLP	EKKVGVVTOI	EPFCLETDRR	600
	GALKAAQTKH	QLEELRQOK	EAACFKARPN	TVISQEPFVP	KKEKKSVAEG	LSGSLVQEPF	660
	QLATEKRAKE	RQLEKRMKE	VEAQKAQOLE	EARLQEEEQK	KEELARLRRE	LVHKANPIRK	720
	YQGLEIKSSD	QPLTVPVSPK	FSTRFHC				747
75	Seq ID NO: 211 Protein Sequence						
	Protein Accession #: NP_065169.1						
	1	11	21	31	41	51	
80	MSRRKQAKPQ	HINSEEDQGE	QOPOQOTPEF	ADAAPAAPAA	GELGAPVNPV	GNDEVASEDE	60
	ATVKALRRRE	THVCEKCAE	FFSISEFLEH	KKNCTKNPPV	LIMNDSGVP	PSEDFSGAVL	120
	SHOPTSGSK	DCHRENGGSS	EDMKEKDAE	SVVYLKTETA	LPPTQDISY	LAKGVANTH	180
	VTLQALRGTK	VAVNQRSADA	LPAPVPGANS	IPHVLQILC	LQQQQLQOIQ	LTEQIRIQVN	240
	MWASHALHSS	GAGADTLKTL	GSHMSQQVSA	AVALLSQAK	SOGLSLDALK	QAKLPHANIP	300
	SATSSLSPLG	APPTLKPQGT	RVLNPNVMSRL	PSALLPQAPG	SVLFQSPFST	VALDTSKKGK	360

5 GKPPNISAVD VKPKDEAALY KHKCKYCSKV FGTDSLLQIH LRSHTGERPF VCSVCGHRFT 420  
 TKGHLKVHFP RHPQVKANPQ LFAEFQDKVA AGNGIPYALS VPDPIDEPSL SLDSPVLVT 480  
 TSVGLQNLST SGTNPKDLTG GSLPGDLQPG PSPSEGGPT LPGAQPNYNS PRAGGPQSGS 540  
 TPEPGSETLK LQQLVENIDK ATTDPNELCI CHRVLSCQSS LKMHYRTHTG ERPFQCKICG 600  
 10 RAFSTKGNLK THLGVRHTNT SIKTQHSCEPI CQKFTNAVM LQQHIRMHMG GQIPNTPLEPE 660  
 NPDFTGSEPT MTVGENGSTG AICHDDVIES IDVEEVSSQE APSSSSKVPT PLPSIHSAEP 720  
 TLGFAMMASL DAPGRVGPAP FNLQRQGSRE NGSVESDGLT NDSSSLMGDO EYQSRSPDIL 780  
 ETTSFQALSP ANSQAESIKS KSPDAGSKAE SSENSRTME GRSSLPSTFI RAPPTTVKVE 840  
 VPGTFVGPST LSPGHTPLLA AQPRRQAKQH GCTROGKNFS SASALQIHER THTGEKPFVC 900  
 15 NIQGRATTK GNKLVHYMTH GANNNSARRG RKLAIENMHA LIGTDGKRVS EIPFKEILAP 960  
 SVNVDPVVNH QYTSMLNGGL AVKTNIEISVI QSGGVPTLPV SLGATSVVNH ATVSKMDGSG 1020  
 SGISADVEKP SATDGVPHQ FPHFLEENKI AVS 1053

Seq ID NO: 212 Protein Sequence  
 Protein Accession #: NP\_005092

1 11 21 31 41 51  
 | | | | |  
 MGWDLTVQML AGNEPQVSLT SSMSVSELKA QITQKIGVHA PQRLAVHPS GVALQDRVPL 60  
 ASQGLGPGST VLLVVDKDE PLSILVRNKK GRSTYEVRL TQTVAHLKQQ VSGLEGVQDD 120  
 20 LFWLTFEGKP LEDQLPLGEY GLKPLSTVFM NLRIRGGGTE PGGRS 165

Seq ID NO: 213 Protein sequence  
 Protein Accession #: Eos sequence

1 11 21 31 41 51  
 | | | | |  
 25 MIILYLPFL LWDQTQGWGF KDGIFFHNSIW LERAAGVYHR EARSQKYKLT YAEAKAVCEP 60  
 EGGHLATYKQ LEAARKIGFH VCAAGWMAKG RVGYPIVKPG PNCQPGKGTI IDYGIRLNRS 120  
 ERMDAYCYNP HAKECCGVFT DPKQIFKSPG FPNEYEDNQI CYWHIRLKYG QRIHLSFLDP 180  
 30 DLEDDPGCLA DYVEIYDSYD DVHGFVGRYC GDELPDDIIS TGNVMTLKF L SDASVTAGGF 240  
 QIKYVAMPDV SKSSQGNKTS TTSTGNKNFL AGRFSLH

Seq ID NO: 214 Protein sequence  
 Protein Accession #: NP\_009046.1

1 11 21 31 41 51  
 | | | | |  
 35 MIILYLPFL LWDQTQGWGF KDGIFFHNSIW LERAAGVYHR EARSQKYKLT YAEAKAVCEP 60  
 EGGHLATYKQ LEAARKIGFH VCAAGWMAKG RVGYPIVKPG PNCQPGKGTI IDYGIRLNRS 120  
 ERMDAYCYNP HAKECCGVFT DPKQIFKSPG FPNEYEDNQI CYWHIRLKYG QRIHLSFLDP 180  
 40 DLEDDPGCLA DYVEIYDSYD DVHGFVGRYC GDELPDDIIS TGNVMTLKF L SDASVTAGGF 240  
 QIKYVAMPDV SKSSQGNKTS TTSTGNKNFL AGRFSLH

Seq ID NO: 215 Protein Sequence  
 Protein Accession #: NP\_006389.1

1 11 21 31 41 51  
 | | | | |  
 45 MAPNASCLCV HVRSEEDMLM TFDANPYDSV KKIKEHVRSK TKVPVQDQVL LLGSKILKPR 60  
 RSLSSYGIDK EKIHLTLKV VKPSDEELPL FLVESGDEAK RHLLQVRRSS SVAQVKAMIE 120  
 TKTGIIPEIQ IVTCNGKRLD DGMMDADYGI RKNLLFLAS YCIGG 165

50 Seq ID NO: 216 Protein Sequence  
 Protein Accession #: NP\_002349.1

1 11 21 31 41 51  
 | | | | |  
 55 MALQLSREQG ITRGSAEIV AEFFSPGINS ILYQRGIYPS ETFTRVQKYG LTLVTTDLLE 60  
 LIKYLANNVE QKMDLYKCS VQKLVVVISN IESGEVLERW QFDIECDKTA KDOSAPREKS 120  
 QKAIQDEIRS VIRQITATVT FLPLLEVSCS FOLLIIYTDK LVPPEKWEES GPQFITNSEE 180  
 60 VRLRSFTTII HKVNSMAYK IPVND 205

Seq ID NO: 217 Protein sequence  
 Protein Accession #: NP\_001889.1

1 11 21 31 41 51  
 | | | | |  
 60 MAQYLSTLL LLATLAVALA WSPKEEDRII PGGIYNADLN DEMVQRALHF AISEYNKATK 60  
 DDYRRRLRV LRARQQTGG VNYFFDVEVG RTICTKSQPN LDTCAFHEQP ELQKKQLCSP 120  
 65 EIVEVPWEHR RSLVKSRCQE S

Seq ID NO: 218 Protein sequence  
 Protein Accession #: NP\_009162.1

1 11 21 31 41 51  
 | | | | |  
 70 MDKLLKCPSPF KCREKEKVA SSENPHVGEN DENQDRGWS KKS DYLLSMI GYAVGLGNVH 60  
 RPPYLTYSNG GGAFLIPYAI MLALAGLPLP FLECSLGQFA SLGPVSVMRI LPLFGVGIT 120  
 MVLISIFVTI YNVIIAYS L YMFASFQSE LPWKNCSSMS DIONCSRPIV THCNVSTVVK 180  
 75 GQIEIQQMK SWVDINNFTC INGSEIYQPG QLPSEQYWNK VALQRSSGMN ETGVIVMYLA 240  
 LCLLLAWLIV GAALFKGKKS SKKVYFTAL FPYVLLILL VRGATLEGAS KGISYYIGAQ 300  
 SNFTKLEKEE VWKDAATQIP YSLSVAGGGL VALSSYNKFK NNCPSDAIVV CLTNCLTSVF 360  
 AGFAIFSIIG HMAHISGKEV SQVVKSGFOL AFIAYPEALA QLPGGPFMSI LFFFMLLTLG 420  
 LDSQFASIEI ITTTIQDLFP KVMKKMRVPI TLGCLLVFL LGLVCVTOAG IYVHLLIDHF 480  
 80 CAGHGILIAA ILELVGILIWI YGQNRPIEDT EMMIGAKRWI FWLWRACHF VITPILLIAI 540  
 FIWLVQFHR PHYGAIPYPD MGVALGWHI VFCTIWIPIIM AIKIIQAKG NIFQRLISCC 600  
 RPASNGWGYL EQHRGERYKD MVDPKKEADH EIPTVSGSRK PE

Seq ID NO: 219 Protein sequence  
 Protein Accession #: NP\_006389.1

1 11 21 31 41 51  
MAPNASCLCV HVRSEEDML TFDANPYDSV KKIKEHVRSK TKVPVQDQVL LLGSKILKPR 60  
RSLSSYGIDK EKTITLTLKV VKPSDEELPL FLVESGDEAK RHLLQVRRSS SVAQVKAMIE 120  
TKGTIIPETQ IVTCNGRLR DGKMDYGI RKGNNLFLAS YCIGG

Seq ID NO: 220 Protein sequence

Protein Accession #: XP\_094741.1

1 11 21 31 41 51  
MKANYSABER FLLLGPSDMP SLQPVLFALV LLCYLLTLTG NSALVLLAVR DPLRLTPMY 60  
FLCHLALVDA GFTTSVVPPL LANLRGPALW LPRSHCTAQL CASLALGSAE CVLLAVMALD 120  
RAAAVCRPLR YAGLVSPRLC RTLASASWLS GLTNSVAQTA LLAERPLCAP RLDDHFICEL 180  
PALLKLAGCG DGTATTNQMF AARVVILLP FAVILASYGA VARAVCCMRP SGGRRRAVGT 240  
CGSHETAVCL FYGSAITYTL QPAQRYNQAR GKFVSLFYTV VTPALNPLIY TLRNKKVKGA 300  
ARRLLRLSLR GQACQ

Seq ID NO: 221 Protein Sequence

Protein Accession #: NP\_061155.1

1 11 21 31 41 51  
MDPTEKLLS RTRARRENLO RKMAERPTAA PRSMTHAKRA RQPLSEASNO QPLSGGEEKS 60  
CTKPSPKGR CSNDTEVEVS NLENKQPVES TSAKSCSPSP VSPQVQQA DTISDSVAVP 120  
ASLLQMRRL NSRLAATAAS SVKTRMQKLA EQRRRWNDND MTDDIPESSL FSPMPSEEKA 180  
ASPPKPLLEN ASATPVGRRG RLANLAATIC SWEDDVNHSF AKQNSVQEQP GTACLSKFSS 240  
ASGASARINS SSVKQEAATFC SQRDGDASLN KALSSSADDA SLVNASISS VIKATSPVKST 300  
TSITDAKSCR QONPELLPKT PISPLKTGVS KPIVKSTLSQ TVPSKGLSR EICLSQSKD 360  
KSTTPGGTG KPFLERFGER COEHSKESPA RSTPHRTPII TPNTKAIQR LFKQOTSSST 420  
THLAQQLKQE RQKELACLGR RFDKGNWSA EKGKNSKSKQ LETKQETHCQ STPLKKHQGV 480  
SKTQSLPVE KVTENQIPAK NSSTEPKGT ECEMTKSSPL KITLFLEEDK SLKVTSDPKV 540  
EQKIEVIREI EMSVDDDDIN SSKVINDLFS DVLEEGELDM EKSQEEMDQA LAESSEEQED 600  
ALNISSMLL APLAQTGVV SPESLVSTPR LELKDTSRSD ESPKPGKFOR TRVPRAESGD 660  
SLGSEDRDL YSIDAYRSQR FKETERPSIK QVIVRKEDVT SKLDEKNNAF PCQVNIKQKM 720  
QELNNEINMQ QTVIYQASQA LNCCVDEHG KGSLEEAEAE RLLLIATGKR TLLIDELNKL 780  
KNGGPORNIK ASPOSEFMPS KGSVTLSEIR LPLKADFVCS TVQKPDAAHY YLILKAGA 840  
ENMVATPLAS TSNLSNGDAL TTTTFTLQD VSNDFEINIE VYSLVQKDP SGLOKKKITS 900  
KSKAITPKRL LTSITTKSNI HSSVMASPGQ LSAVRTSNFA LVGSYTLSS SVGNTKFVLD 960  
KVPFLSSLEG HIYLIKQCV NSSVEERGFL TIFEDVSGFG AMHRRWCVLN GNCISYWTYP 1020  
DDEKRNPIG RINLANCTSR QIEPANREFC ARRTFELIT VRQPEDDRE TLVSQCRDTL 1080  
CVTKMNLSD TKEERDLMMQ KLNQVLVDIR LWQPDACYK IGKP 1124

Seq ID NO: 222 Protein Sequence

Protein Accession #: Q9H8V3

1 11 21 31 41 51  
MAENSVLTST TGRSLADSS IFDSKVTEIS KENLLIGSTS YVEEEMQIE TRVILVQEAG 60  
KQBELTKALK DIKGVFVME SVEEFGELDS PEFENVFVVT DFQDSVFNDL YKADCRVIGP 120  
PVVLNCSQKG EPLPFSCRPL YCTSMMLVL CFTGPRKKEE LVRLVTLVHH MGGVIRKDFN 180  
SKVTHLVANC TQGEKFRVAV SLGTPIMKPE WIYKAWERRN EQDFYAAVDD FRNEFKVPPP 240  
QDCIFSLPFG SDEEKTMEE MTEMQGGKYL PLGDERCTHL VVEENIVKOL PFEPSSKLYV 300  
VKQEWFGSI QMDARAGETM YLYEKANTPE LKKSVMLSL NTPNSNRKRR RLKETLAQLS 360  
RDTDVSPFPF RKPSAEHSL SIGSLDISN TPSSINYGDP TPKSCTKSK SPTVPSPKQS 420  
ARMQVAKELY QTESNYNLL ATIIQLFOVP LEEEGQGGP ILAPEEIKTI FGSTIPDFDV 480  
HTKIKDDLED LIVNWDSSK IGDIFLYKSK DLVKTYPFV NPFEMSKETI IKCEKQKPRF 540  
HAFKINQAK PECGRQSLVE LLIRPVORLP SVALLLNDLK KHTADENPK STLEKAIGSL 600  
KEVTHINED KRKTEAQKQI FDVVYEVGDC PANLLSSHRS LVQVETISL GEHPCDRGEQ 660  
VTLFLPNDCL EIARKRHVI GTFRSPHGT RPPASLKHII LMLPSQIKV LDIRETEDCH 720  
NAFALLVRPP TEQANVLLSF QMTSDELPKE NWLKMCRHV ANTICKADAE NLIYTADPES 780  
FEVNTKMDMS TLRASRAIK KTSKKVTRAF SPSKTPKRAL RRALMTSHGS VEGRSPSSND 840  
KHMVRLSST SSLAGIPSPS LVSLPSPFER RSHTLSRST HLI 883

Seq ID NO: 223 Protein Sequence

Protein Accession #: NP\_002488.1

1 11 21 31 41 51  
MPSRAEDYEV LYITIGSYG RCQKIRKSD GKILVWKELD YGSMTEAEQ MLVSEVNLLR 60  
ELKHPNIVRY YDRIIDRTNT TLYIVMEYCE GGDLASVITK GTERQYLD EFLVRVMTQL 120  
TLALKCHERR SDGGHTVLHR DLKPNVFLD GKQNVKLDF GLARILNHD SFARTFVGT 180  
YYMSPQMNR MSYNEKSDIW SLGCLLYELC ALMPPTAFS QKELAGKIRE GKFRIPYRY 240  
SDELNEIIR MLNLKDYHRP SVEEILENPL IADLVADQR RNLERGRQL GEPEKSQDSS 300  
PVLSELKKE IQLOERERAL KAREERLEQ EQELCVRELR AEDKLARAEN LLQNYSLKE 360  
RKFLSLASPV ELNLPPSSVI KKVHPSGES KENIMRSENS ESQTSKSKC KDLKRLHAA 420  
QLRAQALSDI EKNYQLSRQ ILGMR 445

Seq ID NO: 224 Protein Sequence

Protein Accession #: Eos sequence

1 11 21 31 41 51  
DISYENENYN SSWIPGSHIV SPSLLNLNN GQLLPQLQG PLNSWIPFSS GILQQQQAQ 60  
IPGLSQFSL ALDOFAGLLP NQIPLTGEAS FAQGAQAGV DPLQLTPPO TQPGPSHVMP 120  
YVFSKPMQE QGQMFQYYPV YMLPWFQDP QTVPRSPQOT ROQQYEEQIP FYAQFGYIPO 180  
LAEPISGGO QQLAPDPOLG TAPEIAWMST GEPIPYLQKE AINFRDSAG VFMPSTSPKP 240  
STTNVFTSAV DQITITPELPE EKDKTDSLRE P 271

Seq ID NO: 225 Protein Sequence	
Protein Accession #: eos sequence	
5	1 11 21 31 41 51
	RGKEHRSRMV QIFLFRSRK IYHTKMKIII LIGFLGATLS APLIPQRLMS ASNSNELLN 60
	LNNQQLLPLO LQGPLNSWIP PFGILQOQOQ QAQIRGLSOP SLSDLDQFAG LLPNOIPLTG 120
	EASFAQGAQA QQVDPQLQQT PPTQPGPSH VMPYVPSFKM PQEQGQMFQY YPVYVLPWE 180
10	PQOQTVPFSP QQTQQQYEE QIPFYAQFGY IPQLAEPAIS GQQQQLAFDP QLGTAPETAV 240
	MSTGEETPYL QKEATNFRHD SAGVFMPTST PKPSTTNVTF SAVDQITITE LPEEKDKTDS 300
	LREP 304
Seq ID NO: 226 Protein Sequence	
Protein Accession #: NP_003970.1	
15	1 11 21 31 41 51
	MATTVPQCCR NGLSKSYRRL CKAEBAGIV LETVATAGVV TSVAPMLTLP ILVCKVQDSN 60
	RRRLMPTFQL FLGVLGIFG LTPAPIIGLO GSTGPTRFPL FGILFSICPS CLLAHAVSLT 120
20	KLVRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTNMT NVNVFSELSA PRNEDFVLL 180
	LTYYLFLMAL TFLMSSFTFC GSPTGWRKHG AHIVLTMLLS IAINVANITL LMLPDFDRRW 240
	DDTILSSALA ANGWVFLLAY VSPEFWLLTK QRNPHDYFVE DAFCKPQLVK KSYGVENRAY 300
	SQEEITQCFE ETGDTLYAPY STHFQLQNOP PQKEFSIPRA HAMPSYKDY EVKKEGS 357
Seq ID NO: 227 Protein Sequence	
Protein Accession #: NP_116575.1	
25	1 11 21 31 41 51
	MPKIVLNGVT VDFPFQPYKC QQEYMTKVL ECLQKVNGIL ESPTGTGKTL CLLCTTLAWR 60
30	EHLRDGISAR KIAERAQGEI FPDRLSSWG NAAAAAGDPI ACYTDIPKII YASRTHSOLT 120
	QVINELRNTS YRPKVCVLGS REQLCIHPEV KKQESNHLQI HLCRKKVASR SCHFYNNVEE 180
	KSLEQLASLP ILDIEDLVKS GSKHRCVPYI LSRNLKQAD IIFMPYNYLL DAKSRRAHNI 240
	DLKGTVVIFD EAHNVEMKCE ESASFDLTPH DLASGLDVID QVLEEQTKAA QQGEHPPEFS 300
	ADSPSPGLNM ELEDIAKLKM ILLRLEGAD AVELPGDDSG VTKPGSYIFE LFAEAQITFQ 360
35	TKGCIILDSLD QIIQHLAGRA GVFTNTAGLQ KLADIIQIVF SVDPSGSGP SPAGLGALQS 420
	YKVIHHPDAG HRTAQRSDA WSTTAARKRG KVLSYWCFSP GHSMHVLVRQ GVRSLILTSG 480
	TLAPVSSPAL EMQIPFPVCL ENPHIIDKHQ IHWGVVPRGP DGAQLSSAFD RRPSEECSS 540
	LKALGNIAH VVPYGLLIFF PSYPVMEKSL EFWRARDLAR KMEALKPLFV EPRSKGSPSE 600
	TISAYYARVA APGSTGATFL AVCRCASEG LDPSDTNGRG VIVTGLPYPP RMDPRVVLKM 660
	QFLDEMKGQG GAGGQFLSGQ EWRQASRA VNQAIGRVIR HRQDYGAVFL CDHRFAFADA 720
40	RAQLPSWVRP HVRVYDNFGH VIRDAQFPR VAERTMPAPA PRATAPSVRG EDVASEAKSP 780
	GPFFSTRKAK SLDLHVPSLK QRSSGSPAAG DPESSLCVEY EQEPVPARQR PRGLLAALAH 840
	SEQRAGSPGE EQAHSCSTLS LLSEKRAPEE PRGRKKIRL VSHPEEPVAG AQTDRAKLFM 900
	VAVKQELSA NFATFTQALQ DYKGSDDFAA LAACLGPLFA EDPKKNLLQ GFYQFVRPHH 960
	KQQFEVCIQ LTGRCGGRYP EHSIPRRQRA QPVLDPGTGR APDPKLTVST AAAQQLDPQE 1020
45	HLNQGRPHLS PRPPPTGDPG SQPQWGSQVP RAGKQGHAV SAYLADARRA LGSAGCSQLL 1080
	AALTAYKQDD DLDKVLAVLA ALTTAKPEDF PLLHRFSMFV RPHHKQRFQ TCTDLTGRPY 1140
	PGMEPPGPQE ERLAVPVLT HRAPOGPSPR SEKTGKTQSK ISSFLRQRP GTVAGGEDA 1200
	GPSQSSGPPH GPAASENGL HGRDIAGQQA TGAPGGPLSA GCVCQCGGAE DVVPFQCPAC 1260
	DPQRQCAQW RHLQASRMCP ACHTASRKQS VMQVFWEPEH KDHEGAGGAR PVAAVPGVGA 1320
50	ACPAAGAGCT RSGRNTLHPL AGRDRDGAAG VCPVPRHLC AAAPVPRQPH DVMPVSTAPL 1380
	HAVLELPGAL PLLQRPLRGA 1400
Seq ID NO: 228 Protein Sequence	
Protein Accession #: NP_057518.1	
55	1 11 21 31 41 51
	MPKIVLNGVT VDFPFQPYKC QQEYMTKVL ECLQKVNGIL ESPTGTGKTL CLLCTTLAWR 60
	EHLRDGISAR KIAERAQGEI FPDRLSSWG NAAAAAGDPI ACYTDIPKII YASRTHSOLT 120
60	QVINELRNTS YRPKVCVLGS REQLCIHPEV KKQESNHLQI HLCRKKVASR SCHFYNNVEE 180
	KSLEQLASLP ILDIEDLVKS GSKHRCVPYI LSRNLKQAD IIFMPYNYLL DAKSRRAHNI 240
	DLKGTVVIFD EAHNVEMKCE ESASFDLTPH DLASGLDVID QVLEEQTKAA QQGEHPPEFS 300
	ADSPSPGLNM ELEDIAKLKM ILLRLEGAD AVELPGDDSG VTKPGSYIFE LFAEAQITFQ 360
	TKGCIILDSLD QIIQHLAGRA GVFTNTAGLQ KLADIIQIVF SVDPSGSGP SPAGLGALQS 420
65	YKVIHHPDAG HRTAQRSDA WSTTAARKRG KVLSYWCFSP GHSMHVLVRQ GVRSLILTSG 480
	TLAPVSSPAL EMQIPFPVCL ENPHIIDKHQ IHWGVVPRGP DGAQLSSAFD RRPSEECSS 540
	LKALGNIAH VVPYGLLIFF PSYPVMEKSL EFWRARDLAR KMEALKPLFV EPRSKGSPSE 600
	TISAYYARVA APGSTGATFL AVCRCASEG LDPSDTNGRG VIVTGLPYPP RMDPRVVLKM 660
	QFLDEMKGQG GAGGQFLSGQ EWRQASRA VNQAIGRVIR HRQDYGAVFL CDHRFAFADA 720
70	RAQLPSWVRP HVRVYDNFGH VIRDAQFPR VAERTMPAPA PRATAPSVRG EDVASEAKSP 780
	GPFFSTRKAK SLDLHVPSLK QRSSGSPAAG DPESSLCVEY EQEPVPARQR PRGLLAALAH 840
	SEQRAGSPGE EQAHSCSTLS LLSEKRAPEE PRGRKKIRL VSHPEEPVAG AQTDRAKLFM 900
	VAVKQELSA NFATFTQALQ DYKGSDDFAA LAACLGPLFA EDPKKNLLQ GFYQFVRPHH 960
	KQQFEVCIQ LTGRCGGRYP EHSIPRRQRA QPVLDPGTGR APDPKLTVST AAAQQLDPQE 1020
75	HLNQGRPHLS PRPPPTGDPG SQPQWGSQVP RAGKQGHAV SAYLADARRA LGSAGCSQLL 1080
	AALTAYKQDD DLDKVLAVLA ALTTAKPEDF PLLHRFSMFV RPHHKQRFQ TCTDLTGRPY 1140
	PGMEPPGPQE ERLAVPVLT HRAPOGPSPR SEKTGKTQSK ISSFLRQRP GTVAGGEDA 1200
	GPSQSSGPPH GPAASENGL 1219
Seq ID NO: 229 Protein Sequence	
Protein Accession #: NP_056462.1	
80	1 11 21 31 41 51
	MPAPAPRATA PSVRGEDAVS EAKSPGPFPS TRKAKSLDLH VPSLKQRSSG SPAAGDPSS 60
	LCVEYEQEPV PARQRPRGLL AALEHSEGRA GSPGEEQAHS CSTLSLLSEK RPAEEPRGGR 120

5 KKIRLVSHPE EPVAGAQDTR AKLFMVAVKQ ELSQANFATP TQALQDYKGS DDFAAALACL 180  
 GPLPAEDPKK HNLQGPYQF VRPHKQKQFE EVCIQLTGRG OGYRPEHSIP RRQRAQPVLD 240  
 PTGRTADPKK LTVSTAAQFQ LDPQEHNLQG RPHLSRPPPP TGDPGSQPQW GSGVPRAGKQ 300  
 GQHAVSAYLA DARRALGSAG CSQLLAALTA YKQDDDLQKV LAVLAALTTA KPEDFPLLRH 360  
 FSMFVRPHHK QRFSTQCTDL TGRPYPGMEP PGQPEERLAV PPVLTHRAPQ PGPSRSEKGT 420  
 KTQSKISSPL RRPAGTVGA GGEDAGFSQS SGPPHGAAS EWGEPHGRDI AGQOATGAPG 480  
 GPLSAGCVQK CGCAEDVVPF QCPACDFQRC QACNQRHLQA SRMCPACHTA SRKQSVMQVF 540  
 WPEPQ 545

## 10 Seq ID NO: 230 Protein Sequence

Protein Accession #: NP\_003814.1

1 11 21 31 41 51  
 15 MRALGPGSL LLCLVLALPA LLPVPAVRGV AETPTYPRWD AETGERLVCA QCPPGTFFVQR 60  
 PCRRDSPPTC GPCPPRHYTO FMYLERCRY CNVLCGEREE EARACHATHN RACRCRTGFP 120  
 AHAGFCLSHA SCPPGAGVIA PGTPSQNTQC QPCPGTFPSA SSSSEOCOP HRNCTALGLA 180  
 LNVPGSSSHD TLCTSTCTGFP LSTRVPGAEE CERAVIDFVA FQDISIKRLQ RLLQALEAPE 240  
 GWGPTPRAGR AALQLKLRRR LTELGAQDG ALLVRLQLAL RVARMPLGLER SVRERFLPVH 300

## 20 Seq ID NO: 231 Protein Sequence

Protein Accession #: NP\_116563.1

1 11 21 31 41 51  
 25 MRALGPGSL LLCLVLALPA LLPVPAVRGV AETPTYPRWD AETGERLVCA QCPPGTFFVQR 60  
 PCRRDSPPTC GPCPPRHYTO FMYLERCRY CNVLCGEREE EARACHATHN RACRCRTGFP 120  
 AHAGFCLSHA SCPPGAGVIA PGTPSQNTQC QPCPGTFPSA SSSSEOCOP HRNCTALGLA 180  
 LNVPGSSSHD TLCTSTCTGFP LSTRVPGAEE CERAVIDFVA FQDISIKRLQ RLLQALEAPE 240  
 GWGPTPRAGR AALQLKLRRR LTELGAQDG ALLVRLQLAL RVARMPLGLER SVRERFLPVH 300

## 30 Seq ID NO: 232 Protein Sequence

Protein Accession #: NP\_000584.2

1 11 21 31 41 51  
 35 MAELLASAGS ACSWDFPRAP PSFPPPAASR GGLGGTRSFH PHRGAESPRP GRDRDGVVRV 60  
 MASSRCAPAP GCRCLPQASL AMLGTVLLLL ADHVLLRTAL PRIFSLVPT ALPLLRVWAV 120  
 GLSRMAVLMW GACGVLRATV GSKSENAGA QWLAAKPLA AALGLALPGL ALFRELISWG 180  
 APGSADSTRL LHWGSHPTAF VVSYAALPA AALWHKIGSL WVPQGQGGSG NPVRRLLGCL 240  
 GSETRRLSLP LVLVVLSSLG EMAIPFTTGR LTDWILQDGS ADTPTNLTLS MSILTIASAV 300  
 LEFVGDDLYN NTMGHVHSHL QGEVFGAVLR QETEFFQONQ TGNIMSRVTE DTSTLSDSL 360  
 40 ENLSLFLMYL VRGLCLLIGM LMGSVSLTMV TLITLPLFL LPKKVGKWKY LLEVQVRESL 420  
 AKSSQVAIEA LSAMPTVRSF ANEEGEAQKF REKLQEIKT NQKEAVAYAV NSWTTISISM 480  
 LLKVGILYIG GQVLTSGAVS SCNLVTFVLY QMQFTQAVEV LLSIYPRVQK AVGSSEKIFE 540  
 YLDRTPRCP SGLLTPHLE GLVQFODVSP AYPNRPDVLR LQGLTFTLRP GEVTLVGPEN 600  
 45 GSGKSTVAAL LQNLVQPTGG QLLLDCKPLP QYEHRYLHRQ VAAVQGEPOV FGRSLQENIA 660  
 YGLTQKPTME EITAAAVKSG AHSFISGLPQ GYDTEVDEAG SQLSGGQORQA VALARALIRK 720  
 PCVLILDQAT SALDANSQIQ VEQLLYESPE RYSRVLIT QHLSLVEQAD HILFLEGGAI 780  
 REGGTHQQLM EKKGCYNAMV QAPADAPE 808

## 50 Seq ID NO: 233 Protein Sequence

Protein Accession #: NP\_002414.1

1 11 21 31 41 51  
 55 MRLTVLCVAV LLPGSLALPL PQEAGGMSLE QWEQAQDYLK RFVLYDSETK NANSLEAKLK 60  
 EMQKFFGLPI TGMNLSRVIE IMQKPRCGVP DVAEYSLFPW SPKNTSKVVT YRIVSYTRDL 120  
 PHITVDRLVS KALANWCKEI PLHFRKVVNG TADIMIGFAR GAHGDSYFED GPGNTLAHAF 180  
 APGTGLGGDA HFDEDERWTD GSSGLINFLY AATHELGHSL GMGHSSDPNA VMYPTYNGND 240  
 PQNFKLSQDD IKGIKQLYK RSNRKK 267

## 60 Seq ID NO: 234 Protein Sequence

Protein Accession #: NP\_061144

1 11 21 31 41 51  
 65 MPFIEVCKIK FAEEDAKPKE KEAGDEQSLG GAVAPCAAPR DLATFASTST LHGLGRACGP 60  
 GPHGLRRTLM ALALLTSLAA FLYQAAGLAR GYLTRPHLVA MDPAAPAPVA GFPAVTLCHN 120  
 NFRFRSALSD ADIFHLANLT GLPPKDRDGH RAAGLRYPEP DMVDILNRTG HQLADMLKSC 180  
 NFSGHCSAS NFSVYTRYG KCYTFNADPR SSLPSRAGGM GSGLEIMLDI QQEEYLPWR 240  
 ETNETSFEAG IRVQIHSQEE PPYIHQLGFG VSPGFQTFVS QBEQLTYLP QWGNCRAES 300  
 ELREPELOQY SAYSVSACRL RCEKEAVLQR CHCRMVHMPG NETICPPNIY IECADHTLOS 360  
 70 LGGGPEGPCF CPTPCNLTRY GKEISMVRI NRGSAARYLAR KYNRNETHYR ENFLVLDVFF 420  
 EALTSEAMEQ RAAVGLSALL GDLGGQGLF IGASILTLE ILDYIYEVSW DRKRVNRRP 480  
 KTLPLRTSTG ISTLGLQELK EQSPCPSLGR AEGCGVSSLL PNHKHPHGPP GGLFEDFAC 539

## 75 Seq ID NO: 235 Protein Sequence

Protein Accession #: BAC03567

1 11 21 31 41 51  
 80 MEVSSPSPAQ RLRRKKRPMV QGPAGCQVQF PPSGGTAGD PGLSDPFYP PRSGSLALGD 60  
 PSSDPACSQS GPMFAEDSL PEQPEDSAQL QQEKPSLYIG VRGTTVVRSMQ EVLWTRLREL 120  
 POPVLSEEVV EGIAAGIEAA LWDLTQGTNG RYTKYRSLL FNLRDPRNLD LFLKVVHGDV 180  
 TRYDLVRMSS MQLAPQELAR WRDQEEKUGL NIIEQQQKEP CRLPASKMTH KGEVEIQDM 240  
 DOTLTLEDLV GPQMFMDGSP QALPIASEDT TQGDHMHFLD PNCHICKDWE PSNELLGSFE 300  
 AAKSCGDNIF QKALSQTTPH APEMPKTREL SPTEPQDRVP PSGLHVPAP TKALPCLPPW 360  
 EGVLDMPFIS RFRARAQLVS GHSCRLVQAL PTVIRSAGCI PSNIVWDLA SICPAKAKDV 420  
 CTVRLCPHGA RDTQNCRLLY SYLNDQRHNG LASVEHMGV LLPLPAFQPL PTRLRPLGGP 480

	GLEVTHSSLL LAVLLPKEGL PDTAGSSPWL GKVQKMSFN SKVEKRYYPQ DRRPNVPLK	540
	GTPPPGAWQ QSQGRGSIAP RGISAWQRP RGRGLWPEP ENMQHPGRGQ WPEPGLRQS	600
	QHPYSVAPAG HGFGRGQHFH RDSCPHQALL RHLESATMS HQLQALLCPQ TKSSIRPLQ	660
	RLSSALAAPE PPGPARSSSL GPTDEAGSEC PFPRKA	696
5	Seq ID NO: 236 Protein Sequence Protein Accession #: NP_005282	
	1 11 21 31 41 51	
10	MSKRSWAGS RKPPEMLKL SGSDSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLENM	60
	LFASFYLLDF ILALVGNFLA LWFIRDHKS GTPANVPLMH LAVADLSVCL VLPTRLVYHF	120
	SGMHWPFGEI ACRLTGFLPY LAMYASIFYL TCISADRFIA IVHPVKSLLK RRLVLAHLAC	180
	AFIAVVVAVA MAPLVSPQT VQTNHTVCL QLYREKASHH ALVSLAVFT FFPITTVTCY	240
15	LLIIRSLRQG LRVEKRLTK AVRMIAIVLA IFLVCFVPH VNRSVYVLYH RSHGASCATQ	300
	RILALANRIT SCLTSLNGAL DPIMYFFVAE KPRHALCNLL CGKRLKGPPP SFEGKTNESS	360
	LSAKSEL	367
	Seq ID NO: 237 Protein Sequence Protein Accession #: NP_061113	
20	1 11 21 31 41 51	
	MRKTRLNGLL WMLFVSELR ATKLEEKYE LKEGQTLQVK COYTLKFFAS SQKAWQIIRD	60
	GEMPKTLACT ERPSKNSHPV QVGRILEDY HDHGLLRVM VNLQVEDSGL YQCVIYQPPK	120
25	EPHMLFDRIR LVVTGKFSGT PGSNENSTON VYKIPPTTK ALCPLVTSR TVTQAPPKST	180
	ADVSTPDSEI NLTNVTDIIR VPVFNIVILL AGGFLSKSLV FSVLFAVTLR SFVP	234
	Seq ID NO: 238 Protein Sequence Protein Accession #: NP_003458	
30	1 11 21 31 41 51	
	MEGISIIYTS NYTEEMGSGD YDSMKPCFR EENANFNKIF LPTIYSIIFL TGIVNGNLVI	60
	LVNGYQKKLR SMTDKYRLHL SVADLLFVIT LPPFAVDAVA NWYFGNPLCK AVHVIYTVNL	120
	YSSVLILAFI SLDRYLAIVH ATNSQRPRKL LAEKVVYGVG WIPALLTIP DFIFANVSEA	180
35	DDRYICDRFY PNDLWVVFQ FQHIMVGLIL PGIVILSCYC IISKLSHSK GHOKRKALKT	240
	TVILILAFFA CWLPIYIGIS IDSFILLEII KQCEFENTV HKWISITEAL AFHCCNLPI	300
	LYAFIAGAKF TSAQHALLTSV SRGSSLKILS KGRKGHSSV STESESSSFH SS	352
	Seq ID NO: 239 Protein Sequence Protein Accession #: NP_036338.1	
40	1 11 21 31 41 51	
	MHPQVVISL ILHLADSVAG SVKVGGEAGP SVTLPCHYSG AVTSMCNWRG SCSLFTQNG	60
	IVMTNGTHVT YRKDTRYKLL GDLSRRDVSL TIENTAVSDS GUYCCRVEHR GWFNDMKITV	120
45	SLEIVPPKVT TPIVITVPT VTTVRTSTTV PTTTIVPTT VPTTMSIPT TTVPTMTVS	180
	TTTSVPTTS IPTTSVPVT TVSTFVPPM PLPRQNHFPV ATSPSSPQA ETHPTTLQGA	240
	IRREPTSSPL YSYTTGNDT VTESSDGLWN NNQTLFLEH SLLTANTTKG IYAGVCISVL	300
	VLALLGVII AKYVFPKKEV QQLSVSFSLL QIKALQNAVE KEVQAEDNIY IENSLVATD	359
50	Seq ID NO: 240 Protein Sequence Protein Accession #: NP_004923.1	
	1 11 21 31 41 51	
	MRTYRYFLLL FVVGQPYPTL STPLSKRTSG PPAKKRALEL SGNSKVELNR SKRSWMMNQF	60
	FLLEETGSD YQYVGLKHS QDRGDGSLKY ILSGDGAGDL FIINENTGDI QATKRLDRE	120
55	KPYVILRAQA INRRTRPVPE PESEPIIKIH DINDNEPIFT KEVYATVPE MSDVGTFFVQ	180
	VTATDADPT YGNSAKVVS ILQGPYFVS ESETGIKTA LLNMDRENRE QYQVVIQAKD	240
	MGQMGGLSG TTTVNIITLD VNDNPPRFPO STYQFKTPES SPPGTPIGRI KASDADVGEN	300
	AEIEYSITDG EGLDMFDVIT DQETQEGII VKKLLDFEKK KVYTLKVEAS NPVYEPFLY	360
60	LGPFKDSATV RIVVEDVDEP VPFSKLAYIL QIREDAQINT TIGSVTAQDP DAARNPVKYS	420
	VDRHTDMRI FNIDSGNGSI FTSKLLDRET LLWNNITVIA TEINNPQKSS RVPLYIKVLD	480
	VNDNAEPFAE FYETVCEKA KADQLIQLH AVDKDDPYSG HQFSFSLAPE AASGSNFTIQ	540
	DNKONTAGIL TRKNGYNRHE MSTYLLPVVI SDNDYVQSS TGTIVTVVCA CDHGNMOSC	600
	HAELIHPTG LSTGALVAIL LCIVILLVTV VLFALRRQR KKEPLIISKE DIRDNIVSYN	660
65	DEGGGEEDTQ AFDIGTLRNP EAIEDNKLRR DIVPEALFLP RRTPTARDNT DVRDFINQRL	720
	KENDTDPTAP PYDSLATYAY EGTGSVADSL SSLESVTDA DQDYDYLSDW GPRFKKLADM	780
	YGVDSDDKDS	790
70	Seq ID NO: 241 Protein Sequence Protein Accession #: BAB14227.1	
	1 11 21 31 41 51	
	MRRLTRRLVL PVFGLMITV LFFFWVTKRK LEVPTGPEVO TPKVMSLFFK VAGMSPHAPO	60
	VPVSPTPPYQ RGHLPFGHL AVCHFPCLLQ EAQPHLQTV FLQVRCITLLV YCTDLPTTSI	120
75	IITFHNARS TLLRTIRSVL NRTPTHLIRE IILVDDFND PDDCKQLIKL PKVKCLRNNE	180
	RQGLVRSRIR GADIAQGTTL TFLDSHCEVN RDWLQPLLHR VKEDYTRVVC PVIDIINLOT	240
	FTYIESASEL RGGFDWSLHP QWEQLSPQEK ARRLDPTETI RTPIIAGGLF VIDKAWFDYL	300
	GKYDMMDIWF GGENFEISFR VVMCGSLEI VPCSRVGHVF RKKHYPVFPD GNANTYIKNT	360
	KRTAEVMDKE YQKYYYAARP FALERPPGNV ESRDLRLKQL RCQSFKYLE NIYPELSIPK	420
80	ESSIQKNIR QRQKLESQR QNNQETPNLK LSPCAKVGKE DAKSQVMAFT YTOQILQEEL	480
	CLSVITLFPQ APVVVLVLCIN GDRQQTWTKT GSHIEHIAH LCLDTDMFGD GTENGKEIVV	540
	NPCSSLSMQ HDWMVSS	557
	Seq ID NO: 242 Protein Sequence Protein Accession #: AAH10659	

1 11 21 31 41 51  
MRLRLRLVL PVFGLWITV LFFWVTKRK LEVPTGPEVQ TPKPSDADWD DLWDQPDERR 60  
YLNAKMVRVG DDPYKLYAFN QRESERISSN RAIPDTRHLR CTLLVYCTDL PPTSIIITFH 120  
NEARSTLLRT IRSVLRITPT HLIREIILVD DFSNDPDDCK QLIKLPKVKC LRNNERQGLV 180  
RSRIRGADIA QGTTTLTFLDS HCEVNRDLWQ PLLHRVKEDY TRVVCVIDI INLDTFTYIE 240  
SASELRGGFD WSLHFQWEOQ SPEQKARRLD PTEPIRTPII AGGLFVIDKA WFDYLGKYDM 300  
DMDINGENF EISFRVWMCQ GSLEIVPCSR VGHVFRKHQF YVFPQGNANT YIKTKRTAE 360  
VMDDEYQYV YAAFPALER PFGNVESRLD LRKMLRCQSF KMYLENIYPE LSIPKESSIQ 420  
KGNIRQRQKC LESQRQNNQE TPNLKLSPCA KVKGEDAKSQ VWAFTYTOOI LQEECLSVI 480  
TLFPGAPVVL VLCKNGDDRQ QMTKTGSHIE HIAASHCLDT DMFGDGTENG KEIVVNPCE 540  
SLMSQHMDMV SS 552

Seq ID NO: 243 Protein Sequence  
Protein Accession #: AAH10659.1  
1 11 21 31 41 51  
MRLRLRLVL PVFGLWITV LFFWVTKRK LEVPTGPEVQ TPKPSDADWD DLWDQPDERR 60  
YLNAKMVRVG DDPYKLYAFN QRESERISSN RAIPDTRHLS VLNRTPTHLI REIILVDDFS 120  
NDPDDCQQLI KLPVKLCRN NERQGLVRSR IRGADIAQGT TLTFLDSHCE VNRDLWQPLL 180  
HRVKEDYTRV VCPVIDIINL DTPTYIESAS ELRGGFDWSL HFQWEOQLSPE QKARRLDPT 240  
PIRTPIIAGG LVIDKAWFD YLGKYDMQMD IWGGENFEIS FRVVMCGGSL EIVPCSRVGH 300  
VFRKHPYVP DGNANTYIK NTKRTAEVVM DEYKRYTAA RPFALERPFG NVESRLDLRK 360  
NLRQCSFKWY LENIYPELSI PKESSIQKGN IRQRQKCLSE QRQNNQETPN LKLSPCAOKV 420  
GEDAKSQVWA FTYTOOILQE ELCLSVITLF PGAPVVLVLC KNGDDRQQTW KTGSHIEHIA 480  
SHLCLDTMFP DGTENGKEI VVNPCESSLM SQHMDMVSS 519

Seq ID NO: 244 Protein Sequence  
Protein Accession #: NP\_078848.1  
1 11 21 31 41 51  
MNGKVMSPG FGALTSPRAH SDFLDHCEV NRDLWQPLLH RVKEDYTRV CPVIDIINLO 60  
TFITYESASE LRGGFDWSL FQWEOQLSPEQ KARRLDPTPE IRTPIIAGGL FVIDKAWFDY 120  
LGKYMMDMDI WGENFEISF RVHMCQGSLE IVPCSRVGHV FRKHPYVFP DGNANTYIKN 180  
TKRTAEVMD EYKQYVYAA PFALERPFGN VESRLDLRKN LRQCSFKWYL ENIYPELSIP 240  
KESSIQKGN RQRQKCLSE QRQNNQETPN KLSPCAKVKG EDKQSQVWAF TYTOOILQEE 300  
LCLSVITLFP GAPVVLVLC NGDDRQQTW TGSHIEHIA HLCLDTMFP DGTENGKEIV 360  
VNPCESSLM SQHMDMVSS 378

Seq ID NO: 245 Protein Sequence  
Protein Accession #: NP\_001209.1  
1 11 21 31 41 51  
MPRRSLHAAA VLLLVILKEQ PSSPAPVNGS KWTYFGPDGE NSWSKKYPSC GGLQSPIDL 60  
HSDILOQDAS LTPLEFQGVN LSANKQPLLT NNGHSVKLNL PSDMHIQGLQ SRYSATQLHL 120  
HWGNPNDPHG SEHTVSGQHF AAELHIVHYN SDLYPDASTA SNKSEGLAVL AVLIEMGSPN 180  
PSYDKIFSHL QHVYKQGEA FVPGFNIEEL LPERTAETPR YRGLTTPPC NPTVMTVFR 240  
NPVQISQEQ LLALETALYCT HMDDPSPREM INNFRQVQKF DERLVYTSFS QVQVCTAAGL 300  
SLGILSLAL AGILGICIVV VSIWLFRRK SIKKGNKGV IYKATKMET EABA 354

Seq ID NO: 246 Protein Sequence  
Protein Accession #: BC000278  
1 11 21 31 41 51  
MPRRSLHAAA VLLLVILKEQ PSSPAPVNGS KWTYFGPDGE NSWSKKYPSC GGLQSPIDL 60  
HSDILOQDAS LTPLEFQGVN LSANKQPLLT NNGHSVKLNL PSDMHIQGLQ SRYSATQLHL 120  
HWGNPNDPHG SEHTVSGQHF AAELHIVHYN SDLYPDASTA SNKSEGLAVL AVLIEMGSPN 180  
PSYDKIFSHL QHVYKQGEA FVPGFNIEEL LPERTAETPR YRGLTTPPC NPTVMTVFR 240  
NPVQISQEQ LLALETALYCT HMDDPSPREM INNFRQVQKF DERLVYTSFS QGILSLALA 300  
GILGICIVV VSIWLFRRK IKKGNKGV IYKATKMET AHA 343

Seq ID NO: 247 Protein Sequence  
Protein Accession #: NP\_006623.1  
1 11 21 31 41 51  
MQVDETLPK KGPSLCSARY GIALVLHPCN FTIAQNVIM NITHVAMVHS TSPQSQINDS 60  
SEVLVDSFG GLSKAPKSLP AKSSILGQGF AIWEKNGPPQ ERSRLCSK SGMLLGCTFA 120  
ILIGGFISF LGWPFVYIF GGVGCVCLL WFWVIYDDPF SYPWISTEK EYIISLKKQ 180  
VGSSEKPLPI KAMLRSLPIW SICLCFSHQ WLVTMVVYI PTYISSVYHV NIRDNLGLSA 240  
LPFIVAMVIG MVGGYLDLFL LTKKFRITV RKIATILGSL PSSALIVSLP YLNSGYITAT 300  
ALLTSLCGLS TLQCSGIYIN VLDIAPRYSS PLMGASRGFS SIAPVIVPTV SGFLLSQDPE 360  
FGHRNVFFLL FAVNLLGLL YLITGEADVQ EWAKERKLTR L 401

Seq ID NO: 248 Protein Sequence  
Protein Accession #: NP\_003049.1  
1 11 21 31 41 51  
MPTTVDDVLE HGGEFHFQK QMFLLALLS ATFAPIYVGI VFLGFTPDHR CRSPGVAELS 60  
LRGNSPAEE LNYTVPGGP AGEASPRQR REYVDWQST FDCVDPLASL DTRNSRLPLG 120  
PCRDGWYET PGSSIVTEFN LVCANSWMLD LPQSSVNVGF FIGSMSIGYI ADRFRKLCL 180  
LTTVLINAAA GLWMAISPTY TWMLIFRLIQ GLVSKAGWLI GYLITEFVG RRYRRTVGIF 240  
YQVAYTVGLL VLAGVAYALP HWRNLQFTVA LPNFFFLLY WCIPESPRWL ISQNKNAEAM 300  
RIIKHIAKN GKSLPASLQR LRLEBETCKK LNPFLDLVR TPQIRIGHMI LMYNWTSSV 360  
LYQGLIMHMG LAGDNLYLDF FYSALVEFPA AFMIILTIDR IGRYPFAAS NMVAGAACLA 420



744

Seq ID NO: 255 Protein Sequence  
Protein Accession #: NP\_001243.1

5 1 11 21 31 41 51  
| | | | |  
MPBEGSGCSV RRRPYGCVLR AALVPLVAGL VICLVVCIQR FAQAQQQLPL ESLGWDVAEL 60  
QLNHTGPOQD PRLYWQGGPA LGRSPLHGPE LDKQQLRIHR DGIYMHVHQV TLAICSSTTA 120  
SRHPTTLAV GICSPASRSI SLLRLSPHQG CTIASQRLTP LARGDTLCTN LTGTLSPSRN 180  
10 TDETFFGVQM VRP 193

Seq ID NO: 256 Protein Sequence  
Protein Accession #: NP\_060562.2

15 1 11 21 31 41 51  
| | | | |  
MLFTSFVEQK KKAGVFEQIT KTHGTIIGIT SGIVLVLLII SILVQVQKPR KKMACKTAP 60  
NKTGFQEVFD PPHYELFSLR DKEISADLAD LSEELONYQR MRRSSTASRC IHDHHCQSQA 120  
SSVKQSRTNL SSMELPLRND FAQPOPMKTF NSTFKKSSYT FKQGEHCPEQ ALEDRVMEEI 180  
20 PCEIVVRGRE DSAQASISID F 201

Seq ID NO: 257 Protein Sequence  
Protein Accession #: Eos sequence

25 1 11 21 31 41 51  
| | | | |  
IIAATINNAS MTSPIDNAGL AADDFKKNAS LQTQISTDAE AVSSAKSEIM ELKQVLQSLQ 60  
HELQSVLAMQ SSPGFLADT EAGYVAQLSE IKMYISILEE QICQIRGETE YQNTFYAQLQ 120  
20 DIKTRLEVEI ETYHRLGGE GGSEAREAES KG 152

Seq ID NO: 258 Protein Sequence  
Protein Accession #: NP\_003256.1

30 1 11 21 31 41 51  
| | | | |  
MRQTLPCIVP WCGLLPFGML CASSTTKCTV SHEVADCSHL KLTQVPDDL P TNITVLNLTH 60  
NQLRLPAAAN PTRYSQLTSL DVGFTIISKL EPQLCQKLPK LKVLNLQINE LSQLSDKTFA 120  
35 FCNTLTELHL MSNSIQKIKN NPFVKQKNI TLDLSNGLS STKLGTVQL ENLQELLN 180  
NKQALKSEE LDIFANSSLK KLELSNQIK EFSFGCFHAI GRFLGFLANN VQLGPSLTK 240  
LCLELANTSI RNLSLSNSQL STTSNTTFLG LKMTNLMLD LSYNNLNVVG NDSFAWLPQL 300  
EYFLEYNNI QHLSHSLHG LFNVRVNLK RSFTKQISL ASLPKIDDFS FOWLKCLEHL 360  
NMEDNDIPGI KSNMFTGLIN LKYLSSNSP TSLRTLTNET FVSLAKSPLH IANLTNKNIS 420  
40 KIESDAFSLW GHLEVLDLGL NEIQEQLTQ EWRGLENIFE IYLSYNKYQ LTRNSPALVP 480  
SLQRLMLRRV ALKNVDSSPS PFOPLRLNTI LDLSNMNIAN INDDMLEGLE KLEILDQHN 540  
NLARLWKHAN PGGPIYFLKG LSHLHILNLE SNGFDEI PVE VFQDLFELKI IDGLANNLNT 600  
LPASVFNQV SLKSLNLQKN LITSVEKKVF GPAFRNLTEL DMRPNPFDCI CESIAWFMW 660  
INETHNIPE LSSHLYCNTP PHYHGFVRL FDTSSCKDSA PFELPFMINT SILLIFIFIV 720  
45 LLIHFEGRWI SFYWNVSVR VLGFKEIDRQ TEQFEYAAYI IHAYKDKWV WEHFSSMEKE 780  
DQSLKCLLEE RDEAGVFEI EAINVSIKRS RKIIFVITHH LKDLPLCKRF KVHHAQQAI 840  
EQNLDSITLV FLEEIPDYKL NHALCLRRGM FKSHCILNWP VQKERIGAFR HKLQVALGSK 900  
NSVH 904

Seq ID NO: 259 Protein Sequence  
Protein Accession #: NP\_000570.1

50 1 11 21 31 41 51  
| | | | |  
MDYQVSSPIY DINYYTSEPC QKINVQIAA RLLPPLYSLV FIFGFGVNM L VILILINCKR 60  
LKSMITDIYLL NLAISDLFFL LTVPFMAHYA AAQNDFGNTM COLLTGLYFI GFFSGIFFII 120  
55 LLTIDRYLAV VHAVALKAR TVTFGVVTSV ITWVAVFAS LPGIIFTTSQ KEGLHYTCSS 180  
HFPYSYQFWM KNFQTLKIVI LGLVPLPLVM VICYSGLIKT LLRCRNEKIR HRAVRLIFTI 240  
MIVYFLFWAP YNIVLLNTF QEFFGLNCS SSRLDQAMQ VTETLGMTHC CINPIYAFV 300  
GEKFRNYLLV FFQKHIAKRF CKCCSIFQOE APERASSVYT RSTGEQEISV GL 352

Seq ID NO: 260 Protein Sequence  
Protein Accession #: Eos sequence

60 1 11 21 31 41 51  
| | | | |  
PGGPPGPGPI PGAKGELGLP GARGIDGEKG PKGQKGDPEG PGAGLKGEA GEMGLSGLPG 60  
65 ADGLKGEKGE SASDSLQESL AQLIVEPGPP GPPGPPGPMG LQGIQCPKGL DGAKGEGKAS 120  
GERGPGSLPG PVGPPGLIGL PGTKGEKGRP GEPGLDGFPG PRGEKGRDSE RGEKGERGV 180  
GRKGVGQKQ EPGPPGLDQP CPVGPDGLPV PGCMWK 216

Seq ID NO: 261 Protein Sequence  
Protein Accession #: NP\_004852.1

70 1 11 21 31 41 51  
| | | | |  
MLPQKPKWE SMAGLVLGA LFTSFLLLVY SYAVPPLHAG LASTTPEAAA SCSPPALEPE 60  
75 AVIRANGSAG ECOPRNIVF LKTHKTASST LLNILFRGQ KHRLKFAFPN GRNDFDYPTF 120  
FARSLVQDYR PGACPNICN HMRHYDEV R GLVPTNAIFI TVLRDPAFLP ESSFHYFGPV 180  
VPLTKLSAG DKLTEFLQDP DRYDYPNGFN AHYLRNLLFP DLGYDNLDP SSPQVQEHIL 240  
EVERRFLVL LQEYFDESIV LKDLLCWEL EDVLYFLNA RRDSPVPRLS GELYGRATAW 300  
NMLDSHLYRH FNASFWRKVE AFRGRMARE VAALRHANER MRTICIDGGH AVDAAAIQDE 360  
80 AMQWQPLGT KSILGYNLKK SIGQRHAQLC RRMLTPEIQY LMDLGANLWV TKLWKFIRDF 420  
LRW 423

Seq ID NO: 262 Protein Sequence  
Protein Accession #: NP\_061130.1

1 11 21 31 41 51

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TLEASASEIM PPRQLTNSSE KASDGLIIP DKWAVPDSL KADAVVPELA PSEIAALAH 660  
PEDAESALAD SRESHGKEEP TISVHMRSL SRGFSQPRLL ESSVDPVDEK ELSVTDLSLA 720  
ASETGKKEV NVVSQDQEEK QLMQDHTAFF KKPLTCPKIL ESSVDPIDEI SVIEYTRAGK 780  
PEPSETTPQG AREGGQSDNG NMGEAEIQS AILQVPCLOQ TILSENRISS SQEGSMKQEA 840  
EQIQPEBAKT AIWQVLQPSG GGERIPSGCS IGQIQESSDG SLGEAEQSKK DKAEILISPT 900  
PLSSCLPMT KSSLGVDTN STQTHDVPE NDIVEPRKRQ YVFPVQSKRG TIENERGKPL 960  
PSSPDLTRFP CTSSPEQNVIT DFLISHKMEE PKIEVLQIGE TKPPSSSSSS AKTLAFISGE 1020  
RELEKAPKL QDPCCQGTIG CAKSREREK SLEARACKSP GTLTAVTQSE EVKRPKPEAPG 1080  
SGHLAEGVKR KILSRVAALR LKLEKENIR KNSAFLKMP KLETSLSHTE EKQDPKXPSC 1140  
KREGRAVLL KKIQAEMFPE HSGNVKLSQQ FAEIHEDSTI CWTKDSKSLA QVQRSAGONS 1200  
TVSFAIVQAS PKDQGLYVCC IKNSYGVKTA EFNLTAEVLK QLSRRQDTKG CEEIEFSQLI 1260  
FKEDFLHDSY FGRLRGQIA TEELHFGEGV HRKAFRSTVM HGLMPVFKPG HACVLKVHNA 1320  
IAYGTRNDR LIQRNYKLAQ QECYVONTAR YYAKIYAAEA QPLEGFGVEP EIIPIFLIHR 1380  
PENNIPYATV EEELIGEFVK YSIRDGKEIN FLRRESEAGQ KCCTFOHWVY QKTSGLLVLT 1440  
DMQGVQMKLT DVGIAFLAKG YKGFKNCSM TFIDQFKALH QCNKYCKMLG LKSLQNNNQK 1500  
QKQPSIGKSK VQTNSTVKK AGPETPGKK T 1531

Seq ID NO: 268 Protein Sequence  
Protein Accession #: NP\_602293.1

1 11 21 31 41 51  
MGKQNSKLRP EVLQDLRENT EFTDHELQEW YKGLKDCPT GHLTVDEFKK IYANFFPYGD 60  
ASKFAEHVFR TFDNGDGTI DFREFIIALS VTSRGKLEQK LKWAFSMYDL DNGYISRSR 120  
MLEIVQAIYK MVSSVMKMP DESTPEKRTD KIFRQMDTNN DGKLSLEEFI RGAKSOPSTV 180  
RLQCDPSSA SQF 193

Seq ID NO: 269 Protein Sequence  
Protein Accession #: NP\_002140.2

1 11 21 31 41 51  
MGKQNSKLRP EVLQDLRENT EFTDHELQEW YKGLKDCPT GHLTVDEFKK IYANFFPYGD 60  
ASKFAEHVFR TFDNGDGTI DFREFIIALS VTSRGKLEQK LKWAFSMYDL DNGYISRSR 120  
MLEIVQAIYK MVSSVMKMP DESTPEKRTD KIFRQMDTNN DGKLSLEEFI RGAKSOPSTV 180  
RLQCDPSSA SQF 193

Seq ID NO: 270 Protein Sequence  
Protein Accession #: NP\_003937.1

1 11 21 31 41 51  
MGNAQERPSE TIDRERKRLV ETLQADSGLL LDALLARGVL TGPEYEALDA LPDAERRVRR 60  
LLLVQKGGE AACQELLRCA QRTAGAPDPA WDQHVGPY RDRSYDPPCP GHWTPEAPGS 120  
GTTCPGLPRA SDPDEAGGPE GSEAVQSGTP EEPPEPELEAE ASKEAPEPEPE PEPELEPEAE 180  
AEPEPELEPE PDPEPEPDFE ERDESEDS 208

Seq ID NO: 271 Protein Sequence  
Protein Accession #: NP\_004198.1

1 11 21 31 41 51  
MGGAVVDEGP TGKAPDGGW GNAVLFGCFV ITGFSYAFPK AVSVFFKELI QEFGIGYSDT 60  
AGISSILLAM LYGTGPLCSV CVNRFGCRPV MLVGGFLPASL GMVAASFCSR IIQVYLTGV 120  
ITGLGLALNF QPSLIMLNRY FSKRRPMANG LAAAGSPVFL CALSPLQQLL QDRYGWGGF 180  
LILGGLLIAC VCICALMRPL VVTAQPGSGP PRPSRRLLDL SVFRDRGFVL YAVAAVMVL 240  
GLFVPPFVFW SYAKDLGVDP TKAFLTLTIL GFIDIFARPA AGFVAGLGKV RPYSVYLFSE 300  
SMFPNGLADL AGSTAGDYGG LVVFCIFPGI SYGMVGAQF EVLMAIVGTH KFSSAIGLVL 360  
LMEAVAVLVG PPSGGKLLDA THVYMYVFL AGAEVLTSSL ILLGNFFCI RKKPKPEQPE 420  
VAAAEKKLH KPPADSGVDL REVENFLKAE PEKNGEVVHT PETS 465

Seq ID NO: 272 Protein Sequence  
Protein Accession #: NP\_060705.1

1 11 21 31 41 51  
MAALTTLFKY IDENQDRYIK KLAKWVAIQS VSAWPEKRGE IRRMMEVAAA DVKQLGGSVE 60  
LVDIGKQKLP DGSEIPLPFI LLGRLGSDPO KKTVCITYHL DVQPAALDEG WDSEPFITVE 120  
RDGKLYGRGS TDDKGPVAGW INALEAYKT GQEIIPVNRV CLEGMEESGS EGLDELIFAR 180  
KDTFFKVDY VCISDNVWLG KKKPCITYGL RGICYFFIEV ECSNKLHSG VYGGSVHEAM 240  
TDLILLMGS LVDKRGNILIP GINEAFAVAT EEEHKLVDYI DFDIEEFAD VQAQILLHSH 300  
KDKILMHRWR YPSLSLHGIE GAFSGSGAKT VIPRKVVGKP SIRLVNMTPT EVVGEQVTSY 360  
LTKKFAELRS PNEFKVYMGH GGPVWSDFS HPHYLAGRRA MKTVFGVEPD LTREGGSIPV 420  
TLTFQATGK NMVLLPVGSA DGAHSQNEK LNRNYIEGT KMLAAYLIEV SQLKD 475

Seq ID NO: 273 Protein Sequence  
Protein Accession #: AF258592.1

1 11 21 31 41 51  
MAALTTLFKY IDENQDRYIK KLAKWVAIQS VSAWPEKRGE IRRMMEVAAA DVKQLGGSVE 60  
LVDIGKQKLP PNVVRFCLEG MEESGSEGLD ELIFARKDTF FKDVYVCIS DNYMLGKKKP 120  
CITYGLRGIC YFFIEVECSN KDLHSGVYGG SVHEAMTDLI LLMGSLVDKR GNILIPGINE 180  
AAVAATEEEH KLYDDIDFDI EEFKDVGAQ ILLHSHKJDI LMHRWRYPSL SLHGIDGAFS 240  
GSGAKTVLPR KVVGKFSIRL VPMTEPVVG EDVTSYLTKK FAELRSPNEF KVMYHGKGP 300  
WVSDFSHPHY LAGRRAMKTIV FGVEPDLTRE GGSIPVTLTF QEATGKNVNL LPVGSADGCA 360  
HSQNEKLMRY NYIEGTMKLA AYLYEVSQLK D 391

Seq ID NO: 274 Protein Sequence  
Protein Accession #: NP\_060871.1

	1	11	21	31	41	51	
	MGGNHSKHP	VFDENEENF	DHFQILRAIG	KGSFGKVCIV	QKRDTKKMYA	MKYMNKQKCI	60
5	ERDEVNRVFR	ELQIMQGLEH	PFLVNLWYSP	QDEEDMFVV	DLLEGDLRY	HLQQNVHPT	120
	GTVKLYICEL	ALALEYLQRY	HIHRDIKPD	NILLDEHGV	HITDFNIATV	VKGAERASSM	180
	AGTKPYMAPE	VFOYMDRGP	GYSYPVDMMS	LGITAYELLR	GWRPYEHSV	TPIDEILNMF	240
	KVERVHYST	WCKGMVALLR	KLLTKDPESR	VSSLHDIQSV	PYLADNMWDA	VFKKALMPGF	300
	VFNKGRNLCD	PTFELEENIL	ESKPLHKKKK	RLAQRNSRDG	TKDSCLPNGH	LQHCLETVRE	360
10	EPFIIFNREKL	RRQGGGSQL	LDTDSRGGQ	AQSKLDQGCN	NNLLTHTCTR	GCSS	414
	Seq ID NO: 275 Protein Sequence						
	Protein Accession #: NP_004198.1						
	1	11	21	31	41	51	
15	MGGAVVDEGP	TGVKAPDGGM	GNAVLFGCFV	ITGFSYAPPK	AVSVFFKELI	QEFGIGYSDT	60
	AWISSILLAM	LYGTGPLCSV	CVNRFGCRPV	MLVGLFASL	GMVAASFCS	ITQVYLTTGV	120
	ITGLGLALNF	QPSLIMLARY	FSKRRPMANG	LAAAGSPVFL	CALSPILQLL	QDRYGMRGGP	180
	LILGGLLLNC	CVCAALMRPL	VVTAQPGSGP	PRPSRRLDL	SVFRDRGFVL	YAAVASVMVL	240
20	GLFVPPVFEV	SYAKDLGVDP	TAAAPLLTIL	GFIDIFARPA	AGFVAGLGKV	RPYSVYLFSP	300
	SMFFNGLADL	AGSTAGDYG	LVPFCIPFGI	SYGMVAGLQP	EVLMIAVGTG	KPSSAIGLVL	360
	LMEAVAVLVG	PPSGGKLLDA	THVVMYVPI	AGAEVLTSSL	ILLGNFFCI	RKPKPEQPE	420
	VAAAEEXKLH	KPPADSGVDL	REVEHFLKAE	PEKNGEVVHT	PETSV		465
	Seq ID NO: 276 Protein Sequence						
	Protein Accession #: NP_006589.1						
25	1	11	21	31	41	51	
	MPTNFTVVPV	BAHADGGDE	TAERTEAPGT	PEGPEPERPS	PGDGNPRENS	PFLMVEVEQ	60
	ESFPEGKMA	LFEEEDMSNP	MVSSLNKL	NYTNLSQGV	EHEEDESRR	REKAPRMGT	120
30	FIGVYLPCLQ	NILGVILFLR	LTVIVGVAGV	LESFLIVAMC	CTCTMLTAIS	MSAIATNGVV	180
	PAGGSYYNIS	RSLGPEFGGA	VGLCFYLGTT	FAGAMYILGT	IEIFLTYISP	GAAPQAEAA	240
	GGAAAMLHN	MRVYGTCTLV	LMALVVPVGV	KYVNLALVP	LACVVLSTLA	IYAGVKSFA	300
	DDPDI PVCL	GNRTLSRRSF	DACVYKAGIH	NNSATSALWG	LFCNGSQPSA	ACDEYFIQNN	360
	VTRIQIGIGA	ASGVFLNLW	STYAHAGAFV	EKKGVPSVPV	AEESRASTLP	YVLTDAASF	420
35	TLVLGVIYPS	VTGIMAGSNR	SGDLKDAQKS	IFTGTILAIV	TTSFIYLSCL	VLFGACIEGV	480
	VLRDKFGAL	QGNLVIGMLA	WSPWVIVIG	SFFSTCGAGL	QTLTGAPRL	QAIARDGIVP	540
	FLQVFGHKA	NGEPTWALLL	TVLICETGIL	IASLDSVAPI	LSHFFLMCYL	FVNLCACVOT	600
	LLRTPMWRPR	FKFYHTLSP	LQMSLCLALM	PICSMYIALS	AMLIAGCIYK	YIEYRGAKE	660
	WGDGIRGLSL	NAARYALLRV	EHGPPHTKNW	RPOVLVMLNL	DAEQAVKHPR	LLSFTSQLKA	720
40	GKGLTIVGVS	LEGTYLDKHM	EAQRAEENIR	SLMSTEXTKG	FCQLVVSSSL	RDGMSHLIQS	780
	AGLGGKQNT	VLMAMPASWK	QEDNPFSSKN	PVDTVRDTTA	AHQALLVAKN	VDSFPQNER	840
	FGGHHIDVVM	IVHDCGLML	LPFLLRQHKV	WRKCRMRIFT	VAQVDDNSIQ	NKKDLQMFY	900
	HLRISAEVEV	VENVDNDISA	FTYERTLMME	QRSQMLKQMQ	LSKNEQEREA	QLIHDRNTAS	960
	HTAAARQTA	PPTPKVQMT	WTREKLIAEK	YRSRDTSLSG	PKDLFSMKPD	QSNVRRMHTA	1020
45	VKLGAVVLNK	SQDAQLVLLN	MPGPPKRRQG	DENYMEPLEV	LTEGLNRVLL	VRGGGREVIT	1080
	IYS						1083
	Seq ID NO: 277 Protein Sequence						
	Protein Accession #: NP_004576.1						
50	1	11	21	31	41	51	
	MASPHQEPKP	GDLEIFRLG	YEHWALYIGD	GYVIHLAPPS	EYPGAGSSSV	FSVLSNSAEV	60
	KRGRLDVDVG	GCCYRVNNSL	DHEYQPRPVE	VISSAKEMV	GQMKYSIVS	RNCENFVAQL	120
55	RYGKSRCKQV	EKAKVEVGVA	TALGILVVAG	CSFAIRRYQK	KATA		164
	Seq ID NO: 278 Protein Sequence						
	Protein Accession #: NP_004687.1						
	1	11	21	31	41	51	
60	MLKREGKVQP	YTKTLDGGWG	WMIVHPFLV	NVFMGMKT	FAIFFVVPQE	EFEGTSEQIG	60
	WEGSIMSSLR	FCAGPLVAII	CDILGEKITS	ILGAFVVTGG	YLISWATS	PFLCVTMGLL	120
	PGLSAFLLYQ	VAAVVTTKYF	KKRLALSTAI	ARSGMGLTFL	LAPFTKFLID	LYDWTGALIL	180
	FGAIALNLVP	SSMLLRPIHI	KSENNSGIKD	KGSSLSAHGP	EAHATETHCH	ETEESTIKDS	240
	TTQKAGLPSK	NLTVSQNSQE	EPYNGPNRNR	LLLSKDEESD	KVISWCKQL	FDISLFRNPF	300
65	FYIFTWSFLL	SQLAYFIPTF	HLVARAKTLG	IDIMDASTLV	SVAGILETVS	QIISGWVADQ	360
	NWIKYHYHK	SYLILGIGITN	LLAPLATTFP	LMITYTICFA	IFAGGYLALI	LPVLVDLCRN	420
	STVNRFLGLA	SFFAGNAVLS	GPPIAGNLYD	YTQTYNGSFY	FSGICYLLS	VSFFVPLAE	480
	RMKNLSLT						487
70	Seq ID NO: 279 Protein Sequence						
	Protein Accession #: NP_000349.1						
	1	11	21	31	41	51	
75	MALFVRLAL	ALALALGPAA	TLGPAKSPY	QLVLQHSRLR	GRQHGPNVCA	VQKVGITNRK	60
	YFTNCKQMYQ	RKICGKSTVI	SYECCPGYEK	VPGEKGPAA	LPLSNLYETL	GVVGSTTTQL	120
	YTDRTKELRP	EMEGPGSFTI	FAPSNEAWAS	LPAEVLDSL	SNVNIELNNA	LRHYMVGRRV	180
	LTDCLKHMT	LTSMYQNSNI	QIHYPNGIV	TVNCRALLKA	DHATNGGVH	LIDKVIIST	240
	NINQIIEIE	DTFETLRAAV	AASGLNTMLE	GNGQYTLAP	TNEAFEKIPS	ETLNRILGDP	300
	EARLDLNNH	ILKSAMCAEA	IVAGLSVETL	EGTTLEVCGS	GDMLTINGKA	IISNKDILAT	360
80	NGVIHYIDEL	LIPDSAKTLF	ELAAESDVST	AIDLFRAGL	GNHLSGSERL	TLPLAPNSVF	420
	KDGTTPPIDA	TRNLLRNHII	KDQLASKVLY	HGQTLLETGG	KKLRVVFYRN	SLCIENSICIA	480
	AHDKRGYGT	LFTMDRVLTP	PMCTVMDVLK	CDNRFSMLVA	AIQSAGLTET	LNREGVYTVF	540
	APTNEAFRAL	PPRERSRLG	DAKELANILK	YHIGDEILVS	GGIGALVRLK	SLQGDKLEVS	600
	LIONVVSYNK	EPVAEPDIMA	TNGVVHVITN	VLQPPANRPQ	ERGDELADSA	LEIFKQASAP	660

SRASQSRSVRL APVYQKLLER MKH		683
Seq ID NO: 280 Protein Sequence		
Protein Accession #: NP_663623		
5	1 11 21 31 41 51	
	MEGSGGGAGE RAPLIGARRA AAAAAAGAP AGRRAACGAV LLELLERAA FYGITSNLVL	60
	FLNGAPFCWE GAQASEALLL FMGLTYLGSP FGGMLADARL GRARAILLSL ALYLLGMLAF	120
10	PLLAAPATRA ALGCSARLLN CTAPGPDAAA RCCSPATFAG LVLVGLGVAT VKANITPFGA	180
	DOVKDRGPEA TRRFFNWFYV SINLGAILSL GGIAIQQNV SFVTGYAIPV VCVGLAFVVF	240
	LCQGSVITTK PPDGSAFTDM FKILTYSCCS QKRSGERQSH GEGIGVFQOS SKQSLFDSCK	300
	MSHGCPTEE KVEDVKALVK IVPVFLALIP YMTVYFQMOT TYVLQSLHLR IPEISNITTT	360
	PHTLPAAWLT MFDVALLILL IPLKDKLVDP ILRRHGLLPS SLKRIAVGMF FVMCSAFAAG	420
15	ILBSKRLNLV KEKTINQITG NVVYHAADLS LMWQVPQYLL IGISEIFASI ACLEPAYSAA	480
	PKSMQSAIMG LPPFFSGVGS FVGSGLLALV SIKAIQNMSS HTDPGNINGC YLWYFFFLA	540
	AIQGATLLLF LIISVKYDHH RDHQSRANG VPTSRA	577
Seq ID NO: 281 Protein Sequence		
Protein Accession #: NP_001241.1		
20	1 11 21 31 41 51	
	MVRLPLQCVL WCCLLTAVHP EPPTACREKQ YLINSQCCSL CQPGQKLVSQ CTEFTETECL	60
	PCGESEFLDT WNRETHCHQH KYCDPNLGLR VQKGTSETD TICTCEQWHT CTSEACSCV	120
	LHRSCSPGFG VKQIATGVSD TICEPCPVGF FSNVSSAFER CHPWTSCEKQ DLVVQAGTN	180
25	KTDVVCGPQD RLRLVVIPI IFGILFAILL VLVPIKQVAK KFTNKAPHKQ QEPQEIFPFD	240
	DLPGSNTAAP VQETLHGQCP VTQEDGKESR ISVQERQ	277
Seq ID NO: 282 Protein Sequence		
Protein Accession #: NP_003833.3		
30	1 11 21 31 41 51	
	MEQRQGNAPA ASGARKRHGP GPREARGARP GLRVPKTLVL VVAAVLLLVV AESALITQOD	60
	LAPQRAAPQ QKRSSPSSEGL CPPGHISED GRDCISCKYG QDYSTHWNDL LFLCLRCTCD	120
	SGEVELSPCT TTRNTVQCCE EGTFREEDSP EMCRKCRGTC PRGMVKVGDC TPWSDIECVH	180
35	KESGTHSGSE APAVEETVTS SPGTPASPCS LSGIIIGTVV AAVVLIVAVF VCKSLLNKKV	240
	LPYLKIGCSG GGGDPERVDV SSQRPGAEDN VLNEIVSILQ PTQVPEQEME VQEPAEPTGV	300
	NMLSGIESEH LLEPAEAERS QRRRLVFPAN EGDPTETLRQ CFDDFADLVF FDSWEPLMRK	360
	LGLMDNEIKV AKAEAGHRD TLYTMLIKWV NKTGRDASVH TLLDALETIG ERLAKQKIED	420
40	HLSSGKPMY LEGNADSAMS	440
Seq ID NO: 283 Protein Sequence		
Protein Accession #: NP_671716.1		
45	1 11 21 31 41 51	
	MEQRQGNAPA ASGARKRHGP GPREARGARP GLRVPKTLVL VVAAVLLLVV AESALITQOD	60
	LAPQRAAPQ QKRSSPSSEGL CPPGHISED GRDCISCKYG QDYSTHWNDL LFLCLRCTCD	120
	SGEVELSPCT TTRNTVQCCE EGTFREEDSP EMCRKCRGTC PRGMVKVGDC TPWSDIECVH	180
	KESGTHSGSE APAVEETVTS SPGTPASPCS LSGIIIGTVV AAVVLIVAVF VCKSLLNKKV	240
	LPYLKIGCSG GGGDPERVDV SSQRPGAEDN VLNEIVSILQ PTQVPEQEME VQEPAEPTGV	300
50	NMLSGIESEH LLEPAEAERS QRRRLVFPAN EGDPTETLRQ CFDDFADLVF FDSWEPLMRK	360
	LGLMDNEIKV AKAEAGHRD TLYTMLIKWV NKTGRDASVH TLLDALETIG ERLAKQKIED	420
	HLSSGKPMY LEGNADSAMS	440
Seq ID NO: 284 Protein Sequence		
Protein Accession #: NP_002002.2		
55	1 11 21 31 41 51	
	MRLLALLGV LLSVPGPPVL SLEASEEVEL EPCLAPSLEQ QEQLTVALG QPVRLCCGRA	60
	ERQGHMYKEG SRLAPAGVRV GWRGRLEIAS FLPEDAGRYL CLARGSMIVL QNLTLITGDS	120
	LTSSNDDDEP KSHRDLNRRH SYPOQAPYWT HPQRMKKLH AVPAGNTVKF RCPAAGNPTP	180
60	TIRWLKDGQA PHGENRIGGI RLRRHQHSLV MESVVPSSDRG TYTCLVENAV GSIRYNYLLD	240
	VLESPRHPPI LQAGLPANTT AVVGSDEVLL CKVYSDAQPH IQMLKHIVIN GSSFGADGFP	300
	YVQLKTADI NSSEVEVLVL RNVSADAGE YTCLAGNSIG LSYQSAMLTV LPEEDPTWTA	360
	AAPEARYTDI ILYASGSLAL AVLLLLAGLY RQALHGRHP RPPATVQKLS RFPLARQFSL	420
	ESGSSGKSSS SLVRGVRLSS SGPALLAGLV SLDLPLDPLW EFPDRDLVLG KPLGEGCFQO	480
65	VVRAEAFGMD PARPDQASTV AVKMLKDNAS DKDLADLVSE MEVVKLIGRH KNIINLLGVC	540
	TQEGPLYVIV ECAAKGNLRE FLRARRPPGP DLSPDGPRSS EGPLSFPVLV SCAYQVARGM	600
	QYLESRKCIH RDLAARNVLV TEDVMKIAD FGLARGVHHI DYYKTSNGR LPVKMMAPEA	660
	LFDVRYTHQS DVMSFGILLW EIFTLGSSPY PGIPVEELFS LLREGHRMDR PRHCPPELYG	720
70	LMRECHHAAP SQRPYFKQLV EALDKVLLAV SEEYLDLRLT FGPYSPSGGD ASSTCSSSDS	780
	VFSHDLPLLG SSSFPFGSGV QT	802
Seq ID NO: 285 Protein Sequence		
Protein Accession #: NP_075252.1		
75	1 11 21 31 41 51	
	MRLLALLGV LLSVPGPPVL SLEASEEVEL EPCLAPSLEQ QEQLTVALG QPVRLCCGRA	60
	ERQGHMYKEG SRLAPAGVRV GWRGRLEIAS FLPEDAGRYL CLARGSMIVL QNLTLITGDS	120
	LTSSNDDDEP KSHRDLNRRH SYPOQAPYWT HPQRMKKLH AVPAGNTVKF RCPAAGNPTP	180
	TIRWLKDGQA PHGENRIGGI RLRRHQHSLV MESVVPSSDRG TYTCLVENAV GSIRYNYLLD	240
	VLESPRHPPI LQAGLPANTT AVVGSDEVLL CKVYSDAQPH IQMLKHIVIN GSSFGADGFP	300
	YVQLKTADI NSSEVEVLVL RNVSADAGE YTCLAGNSIG LSYQSAMLTV LPEEDPTWTA	360
	TQEGPLYVIV ECAAKGNLRE FLRARRPPGP DLSPDGPRSS EGPLSFPVLV SCAYQVARGM	420
	QYLESRKCIH RDLAARNVLV TEDVMKIAD FGLARGVHHI DYYKTSNGR LPVKMMAPEA	480
	LFDVRYTHQS DVMSFGILLW EIFTLGSSPY PGIPVEELFS LLREGHRMDR PRHCPPELYG	540

EGPLSFPVLV SCAYQVARGH QYLESRKCIH RDLAARNVLV TEDNMVKIAD FGLARGVHHI 600  
DYKKTSNGR LPVKWMAPEA LFDVYTHQS DVWSFGILLW EIFTLGGSPI PGIPVEELFS 660  
LLREGHRMDR PPHCPPELYG LMRECMHAAP SQRPTEKQLV EALDKVLLAV SEEYLDLRLT 720  
FGPYSPSGGD ASSTCSSSDS VPSHDPLPLG SSSPFGSGV QT 762

5

Seq ID NO: 286 Protein Sequence  
Protein Accession #: NP\_002836.2

1 11 21 31 41 51  
10 MRGLGTCLAT LAGLLTAAG ETPSGGCLFD EPYSTCGYSQ SEGDDFNWEQ VNTLTKPTSD 60  
PWMPSSGLML VNASGRPEGQ RAHLLELPOLK ENDTHCIDFH YFVSSKSNF PGLLNVIYKV 120  
NNGPLGNPIW NISGDPTRTW NRAELAISTF WPNFYQVIFE VITSGHQYL AIDEVKVLGH 180  
PCTRTPHFLR IQNVEVMAQ FATFQCSAIG RTVAGDRML QGIDVRDAPL KEIKVTSRR 240  
FIASFNVNT TKRAGKYRC MIRTEGGVGI SNYAEVVKKE PPVPIAPPOL ASVGATYLM 300  
15 QLNANSINGD GPIVAREVEY CTASGSMNR QPVDSYSKI GHLDPTEYE ISULLTRPGE 360  
GGTSGPAPAL RTRTKCADPM RGPRLKEVVE VKSRQITIRM EPPGYNVTRC HSYNLTVHYC 420  
YQVGQEQVR EEVSMOTENS HPQHTITNLS PYTNVSVKLI LMNPEGRKES QELIVQTD 480  
LPGAVPTESI QGSTFEKIF LQWREPTQTY GVITLYEITY KAVSSFDPEI DLSNQSGRVS 540  
20 KLGNETHPLF FGLYPGTTY FTIRASTAG FGPPATHQPT TKISAPSMPLA YELETPLNQT 600  
DNTVTVMKLP AHSRCAPVSV YQIVVEEER RRTKCTTEIL KCPVPPIHQ NASLLNSQY 660  
FAAEFPADSL QAAQPTIGD NKTNYGYWMT PLLPKYSYRI YFQAASRANG ETKIDCVQA 720  
TKGAATPKPV PEPEKQTDHT VKIACVIAGI LLFVILPLGV VLVNKKRKL KKKETMSST 780  
RQEMTVMVS MDKSYAEQGT NCDEAFSPMD THNLGRSVS SPSSPTMTN TLSTSVNSY 840  
25 YPDETHMAS DTSSLVQSH YKKREPADVP YQTGLHPAI RVADLLQHT QMKCAGSYG 900  
KEEYESFFEG QSAPMSAKK DENRMGNRYG NIIAYDHSRV RLQITIGUTN SDYINGNYD 960  
GYHRPNHYIA TQGMQETIY DFMRMVWHEN TASIIMVTNL VEVGRVKCK YWPDTEIYK 1020  
DIKVTLEIE LLAETVIRTP AVEKRGVHEI REIRQFHFTG WPDHGVPIYA TGLLGFVRQV 1080  
KSKSPPSAGP LVVHCSAGAG RTGCFIVIDI MLDMAEREGV VDIYNCVREL RSRRMVMT 1140  
30 EQVYVFHDA ILEACLCDT SVPASQVRLS YYDMNKLDPQ TNSSQIKEEF RTLMNMTPTL 1200  
RVEDCSIAL PRNHEKRCM DILPPDRCLP FLITIDGESS NYINAAALMS YKQPSAFIVT 1260  
QHPLPNTVKD FWRLLVDYHC TSVMVLDVD PAQLCPQYMP ENGVRHGP I QVEFVSADLE 1320  
EDIISRIFRI YNAARPDQGY RMVQQFQLG WPMYRDTFVS KRSPLKLIQ VDKMQEYNG 1380  
GEGPTVVHCL NGGGRSGTFC AISIVCEMLR HQTVDVFHA VKTLRANKPN MVDLLDQYK 1440  
35 CYEVALEYLN SG 1452

Seq ID NO: 287 Protein Sequence  
Protein Accession #: NP\_057635.1

1 11 21 31 41 51  
40 MGFLQLLVA VLASEHRVAG AAEVFGNSSE GLIEFSVGKF RYFELNRPPF EAILHDISS 60  
NVTFLIPQIH SQYQNTVSP SPTLLSNSSE TGTASCLVFI LRPEQSTCTW YLGTSGIQPV 120  
QNMALLSYS ERDPVPGGCN LEFDLDIDPN IYLEYNFFET TIKFAPANLG YARGVDPPEC 180  
DACTQDSRW RLQYDYVQY LPENDLTEAM LKHLQRMVS PVQKASALK VVTLTANDKT 240  
45 SVSFSLLPGQ GVIYNVIMD PFLNTSAYI PAHTYACSE AGEKSCASLG RVSSKVFFTL 300  
FALLGFFICF FGRHFKTEL PFIQFIIMGF PFYILITRLT PIKYDVNLIL TAVTSGVGM 360  
FLVAVVMRFG ILSICMLCVG LVLGFLISSV TFFTPLGNLK IFHDDGVFW TFSCIALIP 420  
VVMFCRLIL NLTCSVIGS YSVLAIDSY WTSLSYITL NVLKRALNKD FHRAPTNVFP 480  
QTNDFIILAV MGLMVAIGIT LQIRRRGRP FFPHPHYKLM KQERERRVTN ILDPYSHIPP 540  
50 LRERLYGRIT QIKGLPQKEQ PAGERTPLLL 570

Seq ID NO: 288 Protein Sequence  
Protein Accession #: NP\_003811.1

1 11 21 31 41 51  
55 MEPPGDWGP PWRSTPRTDV LRLVLYLTFI GAPCYAPALP SCKEDEYPVG SECCPKCSPG 60  
YRVKEACGEL TGTVCCECPP GTYIAHLNGL SKCLQCQMD PAMGLRASRN CSRTENAVCG 120  
CSPGFCIVQ DGDHCAACRA YATSSPGQV QKGTESQDT LCQNCPPGTF SPNGTLEECQ 180  
HOTKCSMLVT KAGAGTSSSH WMMFLSGSL VIVIVCSTVG LIICVKRRKP RGDVVKVIVS 240  
60 VQRKRQEAEG EATVIEALQA PPDVTTVAVE ETIPSFTGRS PNH 283

Seq ID NO: 289 Protein Sequence  
Protein Accession #: NP\_000943.1

1 11 21 31 41 51  
65 MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLMVF ARLYPCKKFN EIKIFMVNLT 60  
MADMLFLITL PLWIVVYQNG GNMILPKFLC NVAGCLFFIN TYCSVAFLVG ITYNRFQAVT 120  
RPIKTAQANT RKRGISLSLV INVAIVGAAS YFLILDSTNT VPDASAGSNV TRCFEYHEKG 180  
SVFVLIIHIF IVFSFPLVFL IILPCNLVII RTLLMQPVQO QRNAEVKRRR LMWVCTVLAV 240  
70 FIICFVPHHV VQLPMTLAE GFQDSKFHQA INDAHQVTLC LLSTNCVLDP VIYCFLTKKP 300  
RKHLTEKFYS MRSSRKCSRA TTDVTEVVV PFNQIPGNSL KN 342

Seq ID NO: 290 Protein Sequence  
Protein Accession #: NP\_003262.1

1 11 21 31 41 51  
75 GCLGAIKENK CLLLTFLLLL LLVFLLEATI AILFFAYTDK IDRYAQODLK KGLHLYGTQG 60  
NVGLTNWMSI IQTDFRCCGV SNYTDWFEVY NATRVPSGCC LEFSSECLGH APGTWMAKPC 120  
YETVKVWLQE NLLAVGIFGL CTALVQILGL TFAMTHYCOV VKADTYCA 168

Seq ID NO: 291 Protein Sequence  
Protein Accession #: NP\_005620.1

1 11 21 31 41 51  
80 MAKKSANGI YSVSGDEKKG PLIAPGPDGA PAKGDGPVGL GTPGRLAVP PRETWTRQMD 60

	FIMSCVGFV GLGNVVRFPY LCYKNGGGVF LIPYVLIALV GGIPFFLEI SLQGFNKAGS	120
	INVMNICPLP KGLGYASVMI VFYCHTYIIM VLANGFYTLV KSFTTTLPAW TCGHTWNTPD	180
	CVEIFRHEDC ANASLANLTC DQADRRSPV IEFMENKVLK LSGGLEVPGA LNWETLCLL	240
5	ACWLVVYFCV WKGVKSTGKI VYPTATFPYV VLVVLLVRGV LLPGALDGI YLKPDMWKL	300
	GSPQVMDAG TQIFFSYAIG LGALTALGSY NRPNNCYKD AILALINSO TSFFAGPVVF	360
	SILGFMAAEQ GVHISKVAES GPGLAFIAYP RAVTLMPVAP LWAALFFFML LLLGLDSQFV	420
	GVGEGFITGL DLLPASYFYR FQREISVALC CALCFVIDLS MVIDGGMYH QLFDDYSASG	480
	TLLWQAFWE CVVAVVYGA DRPMDDIACM IGYRCPCHMK WCVSFTPLV CMGIFIFNVV	540
10	YYEPLVYNT YVYPWVGEM GWAFALSSML CVPLHLGLCL LRAKGTNAER WQHLTQPIWG	600
	LHLEVRAQD ADVRLTLTLT PVSESSKVVV VESVM	635
	Seq ID NO: 292 Protein Sequence	
	Protein Accession #: NP_037464.1	
15	1 11 21 31 41 51	
	1	60
	1	63
	Seq ID NO: 293 Protein Sequence	
	Protein Accession #: NP_064527.1	
20	1 11 21 31 41 51	
	1	60
	1	87
25	Seq ID NO: 294 Protein Sequence	
	Protein Accession #: NP_002195.1	
30	1 11 21 31 41 51	
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	1	120
	1	180
	1	240
	1	300
35	1	360
	1	420
	1	480
	1	540
40	1	600
	1	660
	1	720
	1	780
	1	840
	1	900
45	1	960
	1	1020
	1	1051
50	Seq ID NO: 295 Protein Sequence	
	Protein Accession #: NP_005492.1	
55	1 11 21 31 41 51	
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	1	120
	1	180
	1	240
	1	300
	1	360
	1	420
	1	480
60	1	540
	1	600
	1	660
	1	720
	1	780
	1	840
	1	900
	1	960
65	1	1020
	1	1066
70	Seq ID NO: 296 Protein Sequence	
	Protein Accession #: NP_003777	
75	1 11 21 31 41 51	
	1	60
	1	120
	1	180
	1	240
	1	300
	1	360
	1	420
80	1	480
	1	540



	CSPFLVTLIT LMVYVYVDPN NVLDAEKAFV SVSLFNILRL PLNMLPQLIS NLQASVSLK	600
	RIQQFLSQEE LDQPSVERKT ISPGYAITIH SGTFTWAQDL PPTLHSLDIQ VPKGALVAVV	660
	GPVGCCKSSL VSALLGEMEK LEGKVHMKGS VAYVPOQAWI QNCTLQENVL FGKALNPKRY	720
5	QQTLEACALL ADLEMLPGGD QTEIGEGIN LSGGQRQVRS LARAVYSDAD IFLDDPLSA	780
	VDSHVAKHIF DHVIGPEGVL AGKTRVLVTH GISFLPQTFD IIVLADGOVS EMGPYPALLQ	840
	RNGSFANFLC NYAPDEQDGH LEDSWTALEG AEDKEALLIE DTLNHTDOLT DNDPVTYVVO	900
	KQFMRQLSAL SSDGEGQGRP VPRRHLPSE KVQVTEAKAD GALTQEEKAA IGTVELSVFM	960
	DYAKAVGLCT TLAICLLYVG QSAAAIGANV WLSAWTNDAM ADSRQNTSL RLGKYAALGI	1020
10	LQGFVLMAL MAMAAGGIA ARVLHQALLH NKIRSPQSFF DTPSGRILN CFSKDIYVVD	1080
	EVLAPVLMAL LNSFFNAIST LVVIMASTPL FTVVILPLAV LYTLVQRFYA ATSRQLKRL	1140
	SVSRSPYISH FSETVTGASV IRAYNRSRDP EIIISDTKVDA NQRSCYPYII SNRWLSIGVE	1200
	FVGNVCVLPFA ALFAVIGRSS LNPGLVGLSV SYSLOVTFAL NWMIRMMSDL ESNIVAVERV	1260
	KEYSKTETEA PMVVEGRSPP EGNPPRGEVE FRNYSVRYP GLDLVLRLDL LHVHGGKRGV	1320
15	IVGRTGAGKS SMTLCLFRIL EAAKGEIRID GLNVADIGLH DLRSLTIIP QDPILFSGTL	1380
	RMNLDPPGYS SEEDINWALE LSHLHTFVSS QPAGLDFOCS EGGENLSVGQ RQLVCLARAL	1440
	LRKSRILVLD EATAAIDLET DNLQIATIRT QPDCTCTVLI ARLNTIMDY TRVLVLDKGV	1500
	VAEFDSPANL IARGIFYGM ARDAGLA	1527
20	Seq ID NO: 297 Protein Sequence Protein Accession #: NP_002692.1	
	1 11 21 31 41 51	
	MHFYRLFLGA TRRFLNPEWK GEIDNMCVYV LTSLLPFKIQ SODIKALQKE LEQFAKLLKQ	60
25	KRITLGYTQA DVGTLGLVLP GKVSQTTIC RFEALQLSFX NMCKLRPLLQ KHVEADNNE	120
	NLQEIKAET LVQARKRKRT SIENRVKRL ENLFLQCPK TLQOISHIAQ QLGLEKDVVR	180
	VMFCNRRQKG KRSSDYAQR EDFAAGSPF SGGPVSVFLA PGPHFGAPGY GSPHFTALYS	240
	SVPPPEGEAP PPVSVTTLGS PLHSN	265
30	Seq ID NO: 298 Protein Sequence Protein Accession #: NP_005449.1	
	1 11 21 31 41 51	
	MASPRRSQGP GRPPPPPPPP ARLLLLLLLP LLLPLAPGAN GWARGAPRPP PSSPPLSIMG	60
35	LMPLTEKAVK GSIGRGVLP VELAIEQIRN ESLLRPYFLD LRLYDTECN AKGLKAFYDA	120
	IKYGNHLMV PGVCPSVTS IIAESLQWVN LVQLSPAATT PVLADKKKYP YFRTVPSDN	180
	AVNPAILKLL KHYQWVRGT LTQDVQRPSE VRNDLTGVLY GEDIEISDTE SFSNDPCTSV	240
	KKLKNVDVRI ILQGFQDNMA AKVPCCAYEE NMYGSKYQWI IPGWYEPSWV EQVHTEANS	300
	RCLRNGLAA MEGYIGVDFE PLSSKIKITI SGKTPOQYER EYNNKRSVG VPSKFGYAYD	360
40	GIWVIAKTLQ RAMEITHASS RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTQGVVFRNG	420
	ERMGTIKFTQ FQDSREVKVG EYNAVADTLE IINDTIRFQG SEPPKDKTII LEQLRKISLP	480
	LYSILSALTI LGMIMASAPL FFNIKNRQK LKMSSPYMN NLIIILGGMLS YASIFLFGLD	540
	GSFVSEKTFE TLTCTVTRWIL TVGYTTAFGA MPAKTRNVHA IFQVNMKKKK IIKDQKLLVI	600
	VGGMLLDLCL ILICWQAVDP LRRTVKYSM EPDPAGRDIS IRPLLEHCEN THMTIWLIV	660
45	YAYKGLLMVF GCFILAWETRN VSIPALNDSK YIGMSVYVNG IMCIIGAASV FLTRDQPMVQ	720
	FCIVALVLIIP CSTITLCLVF VPKLITLRTN PDAATQNRFF QFTQNKKKED SKTSTSVTSV	780
	NQASTSVRLG LQSENHRLRM KITELDKLE EYTMQLQDTP EKTYYIKQNH YQELNDILNL	840
	GNFTSTDDGG KAILKHNHLDQ NPQLQWNTTE PSRTCKDPIE DINSPEHIQR RLSQLPLILH	900
	HAYLPSIGGV DASCVSFPCS PTASPRHRHV PPSFRVMVSG L	941
50	Seq ID NO: 299 Protein Sequence Protein Accession #: NP_055632	
	1 11 21 31 41 51	
	MEARALRLLL LVVCGCLALP PLAEPVCPER CDCQHPQHLL CTNRGLRVVP KTSSLSPSHD	60
55	VTYLSLGNF ITNITAFDFH RLQGLRLDL QYNQIRSLHP KTFEKLRLLE ELYLGNLLIQ	120
	ALAPGTALPL RKLRLIYANG NEISRLSRGS FEGLESVLKL RLDGNALGAL PDVAFAPLGN	180
	LLYLHLESNR IRFLGKNFAF QLGKLRFLNL SANELQPSLR HAATFAPLRS LSSLILSANS	240
	LQHLGPRIFQ HLPRLGLLSL RGNQLTHLAP EAFNGLEALR ELRLGNRLS QLPTALLEPL	300
60	HSLEALDLSG NELSALHPAT FGHGLRLREL SLRNALSAL SGGIFAASPA LYRLDLQNG	360
	WTCDCLRLGL KRMGMNHSQ GRLLTVFVQC RHPPALRGKY LDYLDQDQL NGSCADPSPS	420
	ASLTADRRRG PLPTAAGEEM TPPAGLAEL PPQPLQOQG RFLAGVANDG AARELVGNRS	480
	ALRLSRRGPG LQPPSPSVAA AACPAQSLD LHKKPORGRP TRADPALAEP TPTASPGSAP	540
	SPAGDPQWRA TKHRLGTEHQ ERAAQSDGGA GLPPLVSDPC DFHKFILCNL TVEAVGADSA	600
65	SVRWAVREHR SPRPLGGARF RLLFDRFGQQ PKFHRFVYLP ESSDSATLRE LRQDTPYLV	660
	VEGVLRGRCV PVAPRDHCAG LVTLPEAGSR GGVYDQLLTL ALLTVNALLV LLALAAWASR	720
	WLRRLRARR KGGAPVHVRH MYSTRRLRS MGTGVSAFDS GFQSHRPRTT VCLSEADLI	780
	EFPCDRFMDS AGGGAGGSLR REDRLLRFA D	811
70	Seq ID NO: 300 Protein Sequence Protein Accession #: NP_001783.2	
	1 11 21 31 41 51	
	MCRIAGALRT LPLLAALLQ ASVEASGEIA LCKTGFPEDV YSAVLSKDVH EQGPLLNVKF	60
75	SNCGNKKVQ YESSPADFK VDEDMGVYAV RSPLLSEHA KFLIYAQDKE TQEKMQVAVK	120
	LSLXPTLTEE SVKSAEVEE IVFPRQFSKH SGHLQRQKRD WVIPINLPE NSRGPPFQEL	180
	VIRNSDRDN LSLRYSVTGP GADQPTGTIF IINPISGQLS VTKPLDRBQI ARFHRLRAHV	240
	DINGNQVENP IDIVINVIDM NDNRPFLHQ VWNQTVPEGK KPGTYVMVTY AIDADDNAL	300
	NGMLRYRIVS QAPSTPSNM FTINNETGDI ITVAAGLDRE KVQOYTLIIQ ATOMEGNPTY	360
80	GLSNTATAVI TVTDVNDNPP EFTAMTFYGE VPENRVDIIV ANLTVTDKQD PHTPAMNAVY	420
	RISGDDPTGR FAIQTDPMNS DGLVTVVKPI DFETNRHFVL TVAAENQVFL AKGIQHPPOS	480
	TATVSVTVID VNEPYFAPN PKIIRQEGEL HAGTNLTFT AQDPDRYMQQ NIRYTKLSDP	540
	ANWLKIDPVN QITTIIVLD RESPNVKNNI YNATFLASDN GIPFMSGTGT LQIYLLDIND	600
	NAPQVLQEA ETCTEPPNS INITALDYDI DPNAGPFADF LPLSPVTIKR NWTITRLNGD	660
	FAQLNLKIKF LEAGIYEVPI IITDSGNPPK SNISILRVKV CQCSNGDCT DVDRIVGAGL	720

5 GTGAIIAILL CIIILLILVL MFVVMKRRD KERQAKQLLI DPEDDVRDNI LKYDEEGGGE 780  
EDQDYDLSQL QQPDVTEPDA IKPVGIRRM ERPIHAEPQY PVRSAAPHGP DIGDPINEGL 840  
KAANDNDPTAP PYDSLIVFDY EGSSTAGSL SSLSSSSSGG EQDYDYLDNDM GPRFKKLADM 900  
YGGGDD 906

Seq ID NO: 301 Protein Sequence  
Protein Accession #: NP\_058637.1

10 1 11 21 31 41 51  
| | | | |  
MVSPRMSGLL SQTIVILALIF LPQTRPAGVF ELQIHSFGPG PCPGAPRSPC SARLPCRLFF 60  
RVCLKPLGSE EAAESPCALG AALSARGPVY TEQPGAPAPD LPLPDGLLQV PFRDAMPPTF 120  
SPIIETWREE LGDQIGGPAPW SLLARVAGRR RLAAGGPWAR DIQRAGAMEL RFSYRARCPE 180  
PAVGTACTRL CRPRSPSRSC GPGLRPCAPL EDECEAPLVC RAGCSPHEGF CEDPGECRCL 240  
EGMTGPICTV PVSTSSCLSP RGPSSATTGC LVPGPFGCDG NPCANGGSCS ETPRSFECTC 300  
15 PRGFYGLRCE VSGVTGADGP CFNGGLCVGG ADPDSAYICH CPPGFQGSNC EKRVDRCSLQ 360  
PCRNGGLCLD LGHALRCRCR AGPAGPRCEH DLDDCAGRAC ANOGTCVEGG GAHRCSALG 420  
FGRGRCRCAH DPCAARPCAH GGRCYAHFSG LVCACAPGYM GARCEFPVHP DGASALPAAP 480  
PGLRPGDPQR YLLPPALGLL VAAGVAGAAL LLVHVRRRGH SQDAGSRLLA GTPSPVHAL 540  
20 PDALNNLRTO EGSQDGPSSS VDMNRPEVDV PQGIYVISAP SIYAREVATP LFPPLHTGRA 600  
GQRQLLFPY PSSILSVK 618

Seq ID NO: 302 Protein Sequence  
Protein Accession #: fgenes prediction

25 1 11 21 31 41 51  
| | | | |  
MCQAFNLVLO TLWLLKNARC LQPYPPHAQ SCLISEAKQG QAQLPLGMVK WPLHLRSSL 60  
KRLERKYPSTL LAGEIEAQC KTSSLELPSC DLVTADGSTE VTISENLPAV GPICQOQDS 120  
HVEGMWNISK ASSQOM 136

30 Seq ID NO: 303 Protein Sequence  
Protein Accession #: NP\_079088.1

35 1 11 21 31 41 51  
| | | | |  
MGCGGSRADA IEPRIYESMT RETESTWLTY TDSADPPSAA APDSGPEAGG LHSGLLEDGL 60  
PSNGVPRSTA PGGIPNPEKK TNCETQCFNP QSLSSGPLTQ KQNGLOTTAA KRDAKRMFAK 120  
EVTINVTDSI QQMDRSRIT KNCVN 145

Seq ID NO: 304 Protein Sequence  
Protein Accession #: XP\_040550.1

40 1 11 21 31 41 51  
| | | | |  
MGADGETVVL KNMLIGINLI LLGSMIKPSE CQLEVTTERV QRQSVEEEGG IANYNTSSKE 60  
QPVVFNHYVN INVPLDNLCS SGLASAEQE VSABDETAE YMQQTSOHES QVTFTHRINF 120  
45 PKKACPASS AQVLQELLSR IEMLEREVS LRDQCNAACC QESAATQLD YIPHCSEHGN 180  
FSPSCGGIC NEGMFGKNC EPYCLPGCSS RGVCDVQDCI CDSEYSGDDC SELRCPTDCS 240  
SRGLCVDEGE VCEEPYTGED CRELRCPGDC SOKGRCANGT CLCEEGYVGE DCGQRQCLNA 300  
CSRGQCCEEG LCVCEGYQG PDCSAPAPPE DLRVAGISDR SIELEWDGPM AVTEYVISYQ 360  
PTALGGLQLQ QRVPGDMSGV TITELPGLT YNISVYAVIS NILSLPITAX VATHLSTPQG 420  
LOFKTITETT VEQWMEPFSF SFDGMEISPI PKMNEGVIA QVPSDVTSFN QTGLKPGEEY 480  
50 IWNVALKEQ ARSPPTSASV STVIDGPTQI LVRDVSOTVA FVEWIPPRAX VDFILLKYGL 540  
VGGEGGRITF RLQPPLSQYS VQALRPSCRY EVSVSAVRGT NESDSATTQF TTEIDAPKML 600  
RVGSRATSL DLEWNSGEAE VQEKVYVST LAGEQYHEVL VPRGICPTTR ATLTDLVPQT 660  
EYGVGISAVM NSQSVPMTH NARTELOSPR DLMVTASSET SISLIWTKAS GPIDHYRITF 720  
TPSSGIASEV TVPKDRTSYT LTDLEPGAEE IISVTAERGR QQSLESTVDA FTGFRPISHL 780  
55 HFHVTSSSV NITWSDPSP ADRLILNYSR RDEEEEMMEV SLDATKRHAV LMGLQATEY 840  
IWNLVAVHGT VTSEPIVGS I TIGDIPPKDI TISNVTKDSV MVSWSPPVAS FQYRVSYP 900  
TQVGRLDSSV VPNTVTEFTI TRLNPAETEY ISLNSVRGRE ESERICTLVH TAMDNVPDLI 960  
ATNITPTEAL LQWAPVGEV ENYVIVLTHF AVAGETILVD GVSEEFRLVD LLPSTHYTAT 1020  
MYATNGPLTS GTISTNFSTL LDPPANLTAS EVTRQSALIS WQPPRAEIEI VYLYTKSTDG 1080  
60 SRKELIVDAE DTWIRLEGLL ENTDTYVLLQ AAQDTWSSI TSTAFTTCCR VEPHPQDCAQ 1140  
HLNMGDTLSC VYPIFLNGEL SQKLQVYCDM TTDGCGMIVF QRRNQQTDF FRKHADYRVG 1200  
FGNVEDEFWL GLDNIHRTS QGRYELRVDN RDGQEAAPAS YDRFSVEDSR NLYKLRTGSY 1260  
NGTAGDSLVS HQGRPFSTED RDNDVAVTNC AMSYKGAAMY KNCHRTNLNG KYGESRHSQG 1320  
65 INWYHKGHE FSIPFVEMKM RPYNHRMAG RKRQSLQF 1358

Seq ID NO: 305 Protein Sequence  
Protein Accession #: NP\_005874.1

70 1 11 21 31 41 51  
| | | | |  
MASSVAPYEQ LVRQVEALKA ENSHLRQELR DNSSHLKLE TETSGMKVEL KHLQKLEQE 60  
ARVLVSSGQT EVLEQLKALQ MDITSLYNLK FQPTLGPEP AARTPEGSPV HGSGPSKDSF 120  
GELSRTATRL LEELDRERCP LLNEIEKEEK EKLWYYSQLO GLSKRLDEL P HVETQFSMQM 180  
DLIRQLEFE AQHISLMEF RFGTSDVMQ RAQIRASRL QIDKELLEAQ DRVQOTEPQA 240  
75 LLAVKSVVVD EDPETEVPHT PEDGTQPGN SKVEVVFLL SMLATRDQED TARTLLAMSS 300  
SPESCVMRR SGCLPLLQI LHGTAAAGG RAGAPGAPGA KDARMANAA LHNIVFSQPD 360  
QQLARKEMRY LHLVQIRAY CETCWDWLQ RDGGPEGGA GSAPIPIEQ ICQATCAVMK 420  
LSFDEEYRA MNELGGLQAV AELLQVDYEM HKMTRDPLNL ALRRYAGMTL TNLTFGDVAN 480  
KATLCARRGC MEATVAQLAS DSEELHQVVS SILRNLMSRA DINSKVLRE AGSVTALVQC 540  
80 VLKATKESTL KSVLSALMNL SAHSTENKAA ICQVDGALGF LVSTLYTKCO SNLSAIESG 600  
GGILRNVSST VATREDYRQV LRDNCLQTL LQHLTSHSLT IVSNACGTLN NLSARSARDQ 660  
ELLWDLGAVG MLRNVLVSKH KMIAMGSAAL LRNLARHPA KHQAATAVS PGSCVPSLYV 720  
RQRLAEAL DARHLAQALE HLEKQGPAA EAATKKPLPP LRHLGLAQD YASDSGCCFDD 780  
DDAPSSLAAL AATGEPASPA ALSLFLGSPF LQQAALARTP PTRRGKKEAE KDTSGEAAVA 840  
AKAKAKLALA VARIOQLVED ISALHTSSDD SFLSSSGDPG QEAAREGRAQ SCSPCRGPEG 900

	GRRRAGSRAH	PLRLKAAHA	SLNDSLSNG	SASDGYCPRE	HMLPCPLAAL	ASRRDPKCG	960
	QPRPSRLDLD	LPGCQAEPPA	REATSADARV	RTIKLSPTYQ	HVPLLEGASR	AGAEPLAGPG	1020
	ISPGARKQAW	LPADHLSKVP	EKLAAAPLSV	ASKALQKLA	QEGPLSLSRC	SSLSSLSAG	1080
	RPGPSSEGGDL	DDSDSSLEGL	EEAGPSEAEI	DSTWRAPGAT	SLPVAIPAPR	RNRGRGLGVE	1140
5	DATPSSSEN	YVQETPLVLS	RCSSVSSLGS	FESPSIASSI	PSEPCSGQGS	GTISPSELDP	1200
	SPGQTMPPSR	SKTPPLAPAP	QCPPEATQFS	LQWESYVKRF	LDIADCRERC	RLPSELDAQS	1260
	VRFTVEKPD	NFSCASSLSA	LALHEHYVQ	DVELRLPLSA	CPERGQAGG	AGLHFAGHRR	1320
	REEGPAPTGS	RPRGAADQEL	ELLRECLGAA	VPARLRKVAS	ALVPGRRALP	VPVYMLVPAP	1380
10	APAQEDDSC	DSAEGTVPNF	SSAASLSDET	LQGPDPDQPG	GPAGRQRPTG	RPTSARQAMG	1440
	HRHKAGSAGR	SAEQSRGAGK	NRAGLEPLIG	RPPSAPADKD	GSKPGRTRGD	GALQSLCLTT	1500
	PTEEAIVCYF	GNDSDDEEPPA	AAPTPTHRT	SAIPRAPTRE	RPQGRKEAPA	PSKAAPAAP	1560
	PARTOPLIA	DETPPCYSL	SSASSLSEPE	PSEPPAVHPR	GREPAVTKDP	GPGGGRDSSP	1620
	SPRAAEELQ	RCISSALPRR	RFPVSGLRRL	KPRATRLDER	PAEGSRERGE	EAAGSDRASD	1680
15	LDSEVHRAIO	EGANSIVTWL	HQAAATREA	SSESLSILSF	VSGLSVGSTL	QPPKHKRGRQ	1740
	AEGMGASARR	PEKRCASVVK	TSGSPRSFAG	PEKPRGTQKT	TPGVPAVLGR	RTVIYVPSPA	1800
	PRAQPKGTG	PRATPRKVP	PCLAQPAAPA	KVPSPOQQR	RSLHRPAKTS	ELATLSQPPR	1860
	SATPAPLAK	TPSSSSQTS	PASQPLPRKR	PPVTQAAGAL	PGPGASPVPK	TPARTLLAKQ	1920
	HKTQSRPVRI	PFMQRPARRG	PPPLARAVPE	PGPRGRAGTE	AGPGARGRL	GLVYVASALS	1980
20	SGSESSDRSG	FRQLTPTKE	SPGLARRRSE	LSSAESASA	PQASPRRRGR	PALPAVFLCS	2040
	SRCEELRAAP	RQGPAPARQR	PPAARPSFGE	RPARRTTSES	PSRLPVRAPA	ARPETVKRYA	2100
	SLPHISVARR	PDGAVPAAPA	SADAARRSSD	GEPRPLPRVA	APGTTWRRIR	DEDVPHILRS	2160
	TLBATLPLR	GSTPEDAPAG	PPPRKTSDAV	VQTEEVAAPK	TNSSTSPSLE	TREPPGAPAG	2220
	QQLSLLGSDV	DGPSLAKAPI	SAPFVHEGLG	VAVGFPASR	HGSPRSARV	PPFNVYVSPM	2280
25	VVAATDSAA	EKAPATASAT	LLE				2303
	Seq ID NO: 306 Protein Sequence						
	Protein Accession #: NP_006356.1						
	1	11	21	31	41	51	
30	MPLTEDLITF	NLRNFLLPOL	WESSFSPGAG	GFCTTLPPSF	LRVDDRATSS	TTDSSRAPSS	60
	PRPPGSTSHC	GISTRCTERC	LCVLPLRTSQ	VDDVMAQHD	QEKPHDLAYS	CLGKSPSMNS	120
	QDLGYSTSS	LALGLANLSW	ETKKKNVLHL	VGLDSL			156
	Seq ID NO: 307 Protein Sequence						
	Protein Accession #: AAH32726.1						
	1	11	21	31	41	51	
35	MASTRSIELE	HFEERDKRPR	PGSRRGAPSS	SGGSSSSGPK	GNGLIPSPAH	SAHCSFYRTR	60
	TLQALSSSEK	AKKARFYRNG	DRYFKGLVFA	ISSDRFRSFD	ALLIELTRSL	SDNVNLPQGV	120
40	RTIYITDGR	KVTSLEDELLE	GESYVCASNE	PFRKVDYTKN	INPNWSVNK	GGTSRALAAA	180
	SSVKSSEVKES	KDFIKPKLVT	VIRSGVKPRK	AVRILLNKKT	AHSFEQVLTD	ITEAIKLDGG	240
	VVKRLCTLDG	KQVTCLODFP	GDDDVFIACG	PEKPRYQDD	FVLDSHSECRV	LKSSYSRSSA	300
	VKYSKSKSPG	PSRRSKSPAS	VNGTPSSQLS	TRKSTKSSSS	SPTSFGSFRG	LKISAHGRSS	360
45	SNVNGGPELD	RCISPEGVNG	NRCSESSTLL	EKYKIGKVIG	DGNFAVVKEC	IDRSTGKEFA	420
	LKIIDKAKCK	GKEHLIENEV	SILRRVKHPN	IIMLVEEMET	ATELFLVLMEL	VKGDDLFDAT	480
	TSSTKYTERD	GSAMVYNLAN	ALRYLHGLSI	VHRDIKPNEL	LVCEYDGTGK	SLKLGDFGLA	540
	TVVEGLPLYT	CGTPTYVAPE	IIAETGYGLK	VDIWAAGVIT	YILLCCGFPF	RSENNLQEDL	600
	FDQILAGKLE	FPAPYWDNIT	DSAKELISQM	LQVNVEARCT	AGQILSHPWV	SDASQENNM	660
50	QAEVTGKLKQ	HFNALPKQN	STTTGVSVIM	FDLTV			695
	Seq ID NO: 308 Protein Sequence						
	Protein Accession #: NP_055978.2						
	1	11	21	31	41	51	
55	MEEMEELK	PCVGSFYREP	IILPCSHNLC	QACARNILVQ	TPESESPQSH	RAAGSGVSDY	60
	DYLDLDKMSL	YSEADSGYGS	YGGFASAPTT	PCQKSPNGVR	VFPMPAMPPA	THLSPALAPV	120
	PRNSCTCYQ	CHRSILDDR	GLRGFPKNRV	LEGVIDRYQQ	SKAAALKCQL	CEKAPKEATV	180
	MCEQCDVFCY	DPCLRLCHPP	RGPLAKHRLV	PPAQGRVSRR	LSPRKYSTCT	DHELENHSMY	240
60	CYQCKMPVY	CLEEGKHSS	HEVKALGAMW	KLHKSQLSQA	LNGLSDRAKE	AKEFLVQLRN	300
	MYQQIQENSV	EFEACLVAQC	DALIDALNRR	KAQLLARVNK	EHEHKLKVRV	DQISHCTVKL	360
	RQTTLGMEYC	LEVIKENDPS	GFLQISDALI	RRVHLTEDQW	GKGTLPTRMT	TDGLSLDNS	420
	PLLQSIHQLD	FVQVKASSPV	PATPILQLEE	CCTHNSATL	SWKQPLSTV	PADGYILELD	480
	DGNGGQFREY	YVGKEMTCTV	DGLHFNSTYN	ARVKAFNKGT	VSPYSKTLVL	QTSEVAWPAF	540
65	DPGSAHSDII	LSNDNLTVTC	SSYDDRVLG	KTGPSKGIHY	WELTVDRYDN	HPDPAPGVAR	600
	MDVMQVMLG	KDDKAWAMYV	DNRSWFMHN	NSHTNRTEGG	ITKGATIGVL	LDLNRQNLTF	660
	FINDQQQPI	AFDNVEGLFF	PAVSLNRNVQ	VTLHTGLPVP	DFYSSRASIA		710
	Seq ID NO: 309 Protein Sequence						
	Protein Accession #: NP_116025.1						
	1	11	21	31	41	51	
70	MEDLEEDVRF	IVDETLDPGG	LSPSDSREEE	OITVLVTPEK	PLRRGLSHRS	DPNAVAPAPQ	60
	GVRSLGLPLS	PEKLEILDE	ANRLAAQLEQ	CALQDRESAG	EGLGPRRVKP	SPRRRTFVLK	120
	DSVPVRLDPT	VNSLTRSTPS	PSSLTPRLRS	NDRKGSVRAL	RATSGKRPSN	MKRESPTCNL	180
75	FPAKSPKSS	PLTRSTPPVR	GRAGPSGRAA	ASPPTPIRSV	LAPQPSSTNS	QRLPRPQGA	240
	AKSSQLPIP	SAIPRPSARM	PLTRSVPVPG	RGALPPDSLS	TRKGLPRPST	AGHRVRESGH	300
	KVPVSQRNLN	PVMGATRSNL	QPPRKAVVPG	PTR			333
	Seq ID NO: 310 Protein Sequence						
	Protein Accession #: ref XP_166946.2						
	1	11	21	31	41	51	
80	MGSDSRLEPM	EEKSGDGKAG	WSGALLAEVK	NOGLKLCWM	LVLKAEIVEM	YTSIVGQQG	60
	HRLKMDLLKE	RHHKYLQKP	IKRCSGLMGL	NWSLRPAISS	SPLARSQEHK	HGAKNGEVK	120

	ALSFRKLRLK	KRPPTPSQA	KSWRGRTGSA	ADSPGAAAMA	VQAALLSTHP	FVPPFGGSGP	180
	DGLGGAGFAL	DKGCCPEDDE	TGAPAGALLS	GAEGGDVREA	TRDLSFIDS	ASSNKLALD	240
	KPGKSRKRVN	HRNAPTVAAP	AHGKAAPRRE	ASQAAAAASL	QSRSLAALFD	SLRHVPGGAE	300
	PAGGEVAAPA	AGLGAGGTGG	AGGDVAGPAG	ATAIPGARKV	PLRARNLPSS	FTTEPSRAGG	360
5	GGCGPSGPDV	SLGDLEKGA	AVEFFELLGP	DYGAGTEAAV	LLAAEPLDVF	PAGASVLRGP	420
	PELEPLFEP	PPAVVGNLLY	PEPWSVPGCS	PTKKSPLTAP	RGGLTLNEPL	SPLYPAAADS	480
	PGEDDGRGHL	ASFAFFPDC	ALPPPPPHQ	VSYDSAGYS	RTAYSSLWRS	DGVWEGAPGE	540
	EGAHRD						546
10	Seq ID NO: 311 Protein Sequence Protein Accession #: NP_071406.1						
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	MAPTSPFQ	DPSRRERLQA	LRKEKSRDAA	RSRRGKENFE	FYELAKLLPL	PAAITSQLDK	60
15	ASIIRLTISY	LKMDPANQG	DPPMNLMEG	PPNTSVKGA	QRRSPSALA	IEVFEHLGS	120
	HILOQDGFV	FALNQEGKFL	YISETVSIYL	GLSQVELTGS	SVFDYVHPGD	HVEMAEQLGM	180
	KLPPGRGLLS	QCTAEDGASS	ASSSSQSETP	EPVESTSPSL	LTIDNTLERS	PFIRMKSTLT	240
	KRGVHIKSSG	YKVIHITGR	RLRVSLSHGR	TVPSQIMQLV	VVAHALPPPT	INEVRIDCHM	300
20	FVTRVMDLW	IIYCNRIID	YMDLTPVDIV	GKRCYHFIHA	EDVEGIRHSH	LDLLNKQCV	360
	TKYVRMQRN	GGYIWIQSSA	TIAINAKNAN	EKNIIWVNYL	LSNPYKDTPT	MDIAQLPHLP	420
	EKTSSESTTS	DSSESQKQTS	GITEDNENSK	SDEKGNQSEN	SEDPEDPRKK	SGNACNDNMN	480
	CHDGHSSSN	PDSDSDSDPS	EHSDFENPKA	GEDGFGALGA	MQIKVERIVE	SESDLRILNC	540
	ESLTSDAKD	SDSAGEAGA	ASSKHQKQKK	RRKQKGGSA	SRRRLSSASS	PGGLDAGLVE	600
	PPRLSSPNS	ASVLKIKTEI	SEPINFNDNS	SIWNYPPNRE	ISRNESPYSM	TKPPSSEHFP	660
25	SPQGGGGGGG	GGGGLHVAIP	DSVLTTPGAD	GAAARKTPG	ASATAALAPV	ASDPLSPPLS	720
	ASPRDKHPGN	GGGGGGGGGG	AGGGGSPASN	SLLYTGDLA	LQRLQAGNVV	LPLVHRVTGT	780
	LAATSTAAQR	YTTGTIRYA	PAEVLAMQS	NLLPNAHAVN	FVDVNSPGFQ	LDKTPMEHL	840
	YHHVHRLNMS	GPGGAVSAA	SLTQMPAGNV	PTTAEGLFST	LPPFVYSNGI	HAAQTLEKE	900
	D						901
30	Seq ID NO: 312 Protein Sequence Protein Accession #: NP_005797.1						
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35	MDSASLVSS	RPSSPEPDDL	FLPARSKGSS	GSAFTGCTVS	SSTPSDCPPE	LSAELRGAMG	60
	SAGAHPGDKL	GGSGFKSSSS	STSSSTSSAA	ASSTKQKKQ	MTEPELQQLR	LKINSRERKR	120
	MMDLIAMDG	LRVMPYAHG	PSVRKLSKIA	TLLARNYIL	MLTNSLEEMK	RLVSEIYGGH	180
	HAGFHPSACC	GLAHSAPLA	ATAHPAAAAH	AAHHPAVHHP	ILPPAAAAAA	AAAAAAVSS	240
	ASLPGSGLPS	VGSIRPPHGL	LKSPSAAAAA	PLGGGGGGSG	ASGGFQHWGG	MPCPCSMQV	300
40	PPPHHVVSAM	GAGSLPRLTS	DAK				323
45	Seq ID NO: 313 Protein Sequence Protein Accession #: XP_045127.3						
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	MTVLEESSIS	LMSSVVADFS	EFEEDPQVFN	TLPPSRPIVP	LSSRSMEISE	TSVGISAEVD	60
	MSSVTTQVP	PAHGRLSVPA	SLDPTAGSLS	VAETQVTPSS	VITAFFSVIT	SILLDSSFVS	120
	IANKNTFSLA	VRDPSVFTPY	SLVPSVRESSL	PSDQERSFPS	EKKPRGALDP	ASSFFSTPPL	180
50	ELSGSISSPS	EAPASLSLMP	SDLSPTTSQS	PSPLVETFTL	FDSDDLQSSQ	LSLPSSTNLE	240
	FSQLQPSSEL	PLMTIMLLPS	RSEVSPWSSP	PSDLEFVEA	STVSLTDEA	HFTSAFIETT	300
	SYLESSLSH	ESAVTALVPP	GSEFDILTA	GIQATSPLTT	VHTTPILTES	SLFSTLTTPD	360
	DQISALDGHV	SVLASFSKAI	PTGTVLITDA	YLPSSGSFVS	EATFPPLPTE	LTVVGPSLTP	420
	TEVPLANTSE	VSTTSTGAAT	GGPLDSTLWG	DAASQSPPEP	SAAPPLPSLR	PVTAFTLEAT	480
55	VDTPPLATAK	PPYVCDITVP	DAYLITTVLA	RRAVQEVYIT	AIKEVLRIHF	NRAVELKVYE	540
	LPTDFTPLVT	SGPFVYTAIS	VINVLINSKL	VRDQTPILLS	VKPSFLVPES	RFQVQTVLQF	600
	VPPSVDTGFC	NFTQTEKGL	MTALFEVRKH	HQGTNYLTVQ	ILNITISSSR	VTPRRGPVNI	660
	IFAVKSTQGF	LNGSEVSELL	RNLSVVEFSP	YLGYPVLQIA	EPFQYPQLNL	SQLLKSSMVR	720
	TVLLGVMEQK	LQNEVFQAE	ERKLAQLLSE	VSTRRRMWR	ATVAAGNSVV	QVNVSRLEG	780
60	DDNPVQLIYP	VEDQDGERLS	AVKSSDLINK	MDLQRAAIL	GYRIQGVIAQ	PVDRVKRPS	840
	ESQSNLMVVI	VGWVIVLVV	MVIVVILYWK	LCRTDKLDFQ	PDTVANIQQR	QKLQIPSVKG	900
	FDPAKHGLGQ	RNKDDILIIH	EPAPLPGLPK	DHTTPESENG	VPSPKSKIPS	KNVHRGRVS	960
	PSDADSTVSE	ESSERDAGDK	TPGAVNDGRS	HRAPQSGPPL	PSSGNEQHSS	ASIFEHVDR	1020
	SRPPEASRRV	PSKIQLIAMQ	PIPAFPVQRP	SPADRAVESN	KINKETQAL	RHKSEIEEHR	1080
65	NKIRLRAKRR	GHYEFPVDD	LSSGDTKERH	RVYRRAQM	DKILDPTASV	PSVFIEPRKS	1140
	SRIKRSPPKR	RKHQVNGCPA	DAEKDLITT	DSQGTYYRRP	GVHNSAYIGC	PSDPLPADV	1200
	QTPSSVELGR	YPALFPASQ	YIPQPSIEE	ARQTMHSLD	DAFALVAPSS	QPASTAGVGP	1260
	GVPPGLPANS	TPSQEERRAT	QWGSFYSPAQ	TANNPCSYRE	DYGMTPTPTG	LPRPGFGPGL	1320
	LQSTELVPPD	PQOPQASAEA	PFAARGIYSE	EMPSVARPRP	VGGTTGSQIQ	HLTQVGIASR	1380
70	IGAQPVEIPP	SRGSQYGGPG	WPSYGEDEAG	RREAVPRTSG	REPSAPSGNL	PHRGLQSGPL	1440
	GYPTSSTEDL	QPGHSSASLI	KAIREEELLRL	SQKQSTVQNF	HS		1482
75	Seq ID NO: 314 Protein Sequence Protein Accession #: BAC04820.1						
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	MAPRPLGLPV	LALGGAAAVL	GSVLFILMKT	YFCRGRERRR	DRGEAWGAE	AARLPEWDEN	60
	DFEEDDEEP	ALEELEQREV	LVLGLDGACK	STFLRVLSGK	PPLEGHIPTW	GFNSVRLPTK	120
	DFEVDLLEIG	GSQNLRFYWK	EFVSEVDVLV	FVVDADRLR	LPWARQELHK	LLDQDPDLPV	180
80	VVVANKQDLS	EAMSMGELQR	ELGLQAIDNQ	REVFLAASI	APAGPTFEEP	GTVHIWKLKL	240
	ELLS						244
	Seq ID NO: 315 Protein Sequence Protein Accession #: NP_066563.1						
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	MARRAGGARM	FGSLLLFALL	AAGVAPLSWD	LPEPRSRASK	IRVHSRGNLW	ATGHFMGKKS	60
	LEPSSPSHWG	QLTPPLRDQ	RLQLSHDLG	ILLKKALGV	SLSRPAPQIQ	YRRLLVQILQ	120
5	X						121
	Seq ID NO: 316 Protein Sequence						
	Protein Accession #: NP_002046.1						
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10	MERRRITSAA	RRSYVSSGEM	MVGG LAPGRR	LGPGTRLSLA	RMPPPLPTRV	DFSLAGALNA	60
	GPKETRASER	AEMMELNDRP	ASYIEKVRFL	EQQNKALAAE	LNQLRAKEPT	KLADVYQAEI	120
	RELRLRLDQL	TANSARLEVE	RDNLAQDLAT	VRQKLQDETN	LRLEAENNLA	AYRQEADEAT	180
	LARLDLERKI	ESLEEEIRFL	RKIHEEEVRE	LQEQRLARQOV	HVELDVAKPD	LTAALKEIRT	240
	QYEA MASSNM	HEAEENYRSK	FADLTDAAR	NAELLRQAKH	EANDYRRLOQ	SLTCDLESIR	300
15	GTNESLERQM	REQEERHVRE	AASYQEAAR	LEEEGQSLKD	EMARHLQEYO	DLLNVKLALD	360
	IEIATYRKLL	EGEENRITIP	VQTFPSNLQIR	ETSLDTKSVS	EGHLKRNIVV	KTVEMRDGEV	420
	IKESQEHKQD	VM					432
	Seq ID NO: 317 Protein Sequence						
	Protein Accession #: AAA19191.1						
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20	MRLLSSLSGS	SVSSDAEEYQ	PPIMKSYLYQ	LQOEAPRPKR	IICPREVENR	PKYYGREPHG	60
	IISREQADEL	LCQVEGAYIL	RESQRQPCY	TALARFGNOT	LNVRLEFDGK	HFVGEKRFES	120
25	IHDVLTGDLI	TLVIETKAAE	YISKMTNPI	YEHIGYATLL	REKVSRRLSR	SIQEPKRTNV	180
	THEENTAVEK	ISSLVRRRAAL	THNDNHFNYE	KTHNPKVHTF	RGPHWCEYCA	NFMWGLIAQG	240
	VRCSDCGLNV	HKQCSKHVPN	DCQPDILKRIK	KVYCCDLTTL	VKAHNTQPM	VVDICIREIE	300
	ARGLSEGLY	RVSQFTHEIE	DVKMAFDRDG	EKADISANVY	PDINIITGAL	KLYFRDLPIP	360
30	VITYDTYSKF	IDAAKISNAD	ERLEAVHEVL	MLLPPAHYET	LRYLMHLKK	VTMNEKDNFM	420
	NAENLGIVFG	PLMRPFEDS	TLTLHDMRY	QKLIVQILIE	NEDVLF		466
	Seq ID NO: 318 Protein Sequence						
	Protein Accession #: XP_113553.1						
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35	MKRAHPEYSS	SDSELDETIE	VEKESADENG	NLSSALGSM	PTTSSQILAR	KRRRGIIER	60
	RRDRINNSLS	ELRLVPSAF	EKQGSAKLEK	AEILQMTVDH	LKMLHTAGGK	GYFDAHALAM	120
	DYRSLGFREC	LAEVARYLSI	TEGLDASDPL	RVRLVSHLAN	YASQREAAAG	AHAGLGHIPW	180
40	GTVPGLHPIH	AHPLLLPQNG	HGNAGTTASP	TEPHHQRLG	SAHPEAPALR	APPSGSLGVP	240
	LPVVTASAKL	SPPLLSVAS	LSAPFSPFGS	PHLLSPHALS	PSAPTQAANL	GKPYRPMGTG	300
	IGAF						304
	Seq ID NO: 319 Protein Sequence						
	Protein Accession #: NP_001927.2						
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45	MTTAKEPSAS	GKSVQQEQE	LVGSNPPQRN	WKGIAIALLV	ILVICSLIVT	SVILLTPAED	60
	NSLSQKKKVT	VEDLFSDFK	IHDPEAKWIS	DTEFIYREQK	GTVRIMNVET	NTSTVLIEGK	120
50	KIESLRIRY	EISPDREYAL	FSYNVEPIYQ	HSYTGYYVLS	KIPHGDPQSL	DPPEVSNAKL	180
	QYAGMGPKGO	QLIFIFENNI	YICAHVQKQA	IRVSVTKGEG	VIYNGLSDWL	YEEELKTHI	240
	AHMSDPDQTR	LAYAAINDSR	VPIMELPTYT	GSYPTVKPY	HYPKAGSENP	SISLHVIGLN	300
	GTEDLEEMPP	PDDPRMREY	ITMVKWATST	KVAVTWLWRA	QNVSILTICD	ATTGVCTKKH	360
	EDESEAWLHR	QNEEPVFSKD	GRKFFFIIRAI	PQGGRGKFYH	ITVSSSQPN	SNDNIQSITS	420
55	GDWVDTKILA	YDEKGNKIYF	LSTEDLPRRR	QLYSANTVGN	FMRCQLSCDL	VENCTYFAS	480
	FSHSGMPFLL	KCEGPGVPMV	TVHNTDKKK	MPDLETNEHV	KKAINDRQMP	KVEYRDIEID	540
	DYNLPMQILK	PATFTDTTHY	PLLLVVDGTP	GSQSVAEKFE	VSWETVMVSS	HGAVVVKCDG	600
	RGSQFQGTKL	LHEVRRRLGL	LEEKQMEAV	RTNLKEQYID	RTRVAVFGKD	YGGYLSTYIL	660
	PAKGENQGTQ	FTCGSALSPI	TDFKLYASAF	SERYLGLHGL	DNRAVEMTKV	AHRVSALEEQ	720
60	QFLIIHPTAD	EKIHPQTAEE	LITQLIRGKA	NYSLQIYPDE	SHYFTSSSLK	QHLYSRIINF	780
	FVECFRIQDK	LPTVTAKED	EED				803
	Seq ID NO: 320 Protein Sequence						
	Protein Accession #: XP_087461.1						
	1	11	21	31	41	51	
65	MLPPLAALLA	AACPLPPVRG	GAADAPGLLG	VPSNASVNAS	SAASPSPRGC	WPRRPPGPPS	60
	ARARRRRRRR	RRLCNISVQR	QMLSSLLVRM	GRPRGFQCDL	LLFSTNAHRG	AFFAAFHRV	120
	GPPLLIEHLG	LAAGGAQDDL	RLCVGCGMVR	GRRTGRLRPA	AAPSAAAATA	GAPTALPAYP	180
70	AAEPGPPLWL	QGEPLHFCLL	DFSLEELQGE	PGWRLNRKPI	ESTLVACFMT	LVIIVVMSVA	240
	LIWVPPIIAG	FLPNGMEQRR	TTASTTAATP	AAVPAGTTAA	AAAAAAAAAA	AVTSGVATK	299
	Seq ID NO: 321 Protein Sequence						
	Protein Accession #: NP_036393.1						
	1	11	21	31	41	51	
75	MDLQGRGVPS	IDRLRVLLML	FHTMAQIMAE	QEVNLSGLS	TNPEKDIFVV	RENGTTCLMA	60
	EFAAKFIVPY	DVMAENYVDL	ITEQADIALT	RGAEVKGRCG	HSQSELOQVF	VDRAVALKML	120
	FVKESHMMSK	GPEATWRLSK	VQFVYDSSEK	THFKDAVSAG	KHTANSHHLS	ALVTPAGKSY	180
80	EQQAQHTISL	ASSDPQKTVT	MILSAVHIQ	FDIISDFVFS	SEHKCPVDER	DQLEETLFLI	240
	LGLILGLVIM	VTIAIYHVMH	KMTANQVQIP	RDRSQYKHM			280
	Seq ID NO: 322 Protein Sequence						
	Protein Accession #: NP_653187						
	1	11	21	31	41	51	

757

	PRGPHGGAAS	GLNGCCRCGA	RGPEERLLEF	YLAMPFATPM	EAEARRSLA	QDAPPLFVPG	120
	VLLKEFTVSG	NILTIRLTAA	DHRQLQLSIS	SCLQQLSLIM	WITQCFLPVF	LAQPPSGQRR	180
5	Seq ID NO: 330 Protein Sequence LEK6 Protein Accession #: NP_066274						
	1	11	21	31	41	51	
	MQAEGQGTGG	STGDADGPGG	PGIPDGPGGN	AGGPGEAGAT	GGRGPRGAGA	ARASGPRGGA	60
10	PRGPHGGAAS	AQDGRCPGGA	RRPDSRLQLF	RLTAADHRQL	QLSISSCLOQ	LSLLMWITQC	120
	FLPVFLAQAP	SGQRR					135
15	Seq ID NO: 331 Protein Sequence Protein Accession #: NP_008859.1						
	1	11	21	31	41	51	
	MDLVLRCLL	HLAIVIGALLA	VGATKVPFRNQ	DWLGVSRLQR	TKAWNROLYP	EMTEAQRLLDC	60
	WRGQVSLKV	SNDGPTLIGA	NASFIALNPF	PGSQKVLFDG	QVIMVNTI	NGSQVMGGQP	120
	VYPQETDAD	IFPDGGPCPS	GSWSQKRSFV	YVWKTGQYV	QVLGGPVSGL	SIGTGRAMLG	180
20	THTMEVTYH	RRGSRSYVPL	AHSSSAFTIT	DQVPFVSVS	QLRALDGGNK	HFLRNQPLTF	240
	ALQLHDPSTY	LAEADLSYTH	DFGDSSTGLI	SRALVVTHTY	LEPGVTAQV	VLQAAIPLTS	300
	CGSSPVPGTT	DGHRPTAEAP	NTTAGQVPTT	EVVGTTPGQA	PTAEPSGITS	VQVPTTEVIS	360
	TAPVQMPTAE	STGHTPEKVP	VSEVMGTILA	EMSTPEATGM	PTAEVSIVVL	SGTTAAQVTT	420
	TEWVETTAIE	LPIPEFEGPD	ASSIMSTESI	TGSLGPLLDG	TATLRVLKRV	VPLDCVLYRY	480
25	GSFVYTLDI	QGIESAEILQ	AVPSGEGDAP	ELTVSQOGL	PKEACHEISS	PGCQPPAQR	540
	CQPVLPSPAC	QLVLHQLKGG	SGTYCLAVS	LADTNSLAVV	STQLIMPQGE	AGLGQVPLIV	600
	GILLVLMAVV	LASLIYRRRL	MKQDFSVPLQ	PHSSSHMLRL	PRIFCSPIG	ENSPILLSQOQ	660
	V						661
30	Seq ID NO: 332 Protein Sequence Protein Accession #: NP_001913.2						
	1	11	21	31	41	51	
	MSPLMWGLL	SCLGCKILPG	AQQQFPRVCM	TVDSLNVKEC	CPRLGAESAN	VCGSQOGRGQ	60
	CTEVRADTRP	MSGPYILRNQ	DDRELWPRKF	FHRTCKCTGN	FAGYNOGDCK	FGMTGNCER	120
35	KKPPVIRQNI	HSLSPQEREQ	FLGALDLAKK	RVHPDYVITT	QHWLGLIGPN	GTQPFANCS	180
	VYDFVFWLHY	YSVRTLLPG	GRPYRAIDFS	HQGPAPVTWH	RYHLCLLDRD	LQRLIGNESF	240
	ALPYWNFATG	RNECDVCTDQ	LFGAARPDOP	TLISRNSRFS	SWETVCDSLD	DYNHLVTLCN	300
	GTVEGLLRN	QMGNSMKPLK	TLKDIRDCLS	LQKFDNPPFF	QNSTFSPRNA	LEGFDKADGT	360
	LDSQVMSLHN	LVHSPFNGTN	ALPHSAANDP	IFVVLHSTFD	AIFDEMKNRF	NPPADAWPQE	420
40	LAPIGHNRMV	NMVFPFPPVT	NEELFLTSQD	LGYSYALDLP	VSVETPGWP	TTLVVMGTL	480
	VALVGLFVLL	APLQYRLRRK	GYTPLMETHL	SSKRYTEEA			519
45	Seq ID NO: 333 Protein Sequence Protein Accession #: XP_059422.1						
	1	11	21	31	41	51	
	MNHLPLFLL	ASVTLPSICS	HFNPLSLEEL	GSNTGIQVFN	QIVKSRPHDN	IVISPHGIAS	60
	VLGMLQLGAD	GRTKKQLAMV	MRYGVNGVGK	ILKKINKAIV	SKGNKQIVTV	ANAVFVKNAS	120
	EIEVFPVTRN	KDVFQCEVRN	VNPEDPASAC	DSINAWKNE	TRDMIDNLLS	PDLIDGVLTR	180
50	LVLVNAVYFK	GLWKSRRQPE	NTKKRTFVAA	DGKSQVPM	AQLSVFRCGS	TSAPNDLWYN	240
	FIELPVHGES	ISMALALPTE	SSTPLSAIIP	HISTKTIDSM	MSIMVPKRVQ	VILPKFTAVA	300
	QTDLKEPLKV	LGITDMFDSS	KANPAKITRS	ENLHVSHILO	KAKIEVSEDO	TKASAATTAI	360
	LIARSSPPWF	IVDRPFLFFI	RHNPTGAVLF	MGQINKP			397
55	Seq ID NO: 334 Protein Sequence Protein Accession #: XP_040512.2						
	1	11	21	31	41	51	
	MRQHDTRNGR	IVLISGRRSF	CSIFSULPYR	DSTQVGDJL	DGGRQSTGAV	SLKEIIGLEG	60
60	VELGADGKTV	SYTQPLLPN	AFGARNTID	STSSFSQFRN	LSHRSLSIGR	ASGTQGLDIT	120
	GSDLGDFMDY	DPNLLDDPQH	PCGKHKRVLI	FPSYMTTVID	YVKPSDLKKD	MNETFKEKFP	180
	HIKLTLSKIR	SLKREMRKLA	QEDCGLEBPT	VAMAPVYFEK	LALKGKLNQ	NRKLCAGACV	240
	LLAAKIGSDL	KHEVKHLID	KLEEKFRLLNR	RELIAFEFPV	LVALEFALHL	PEHEVMPHYR	300
65	RLVQSS						306
70	Seq ID NO: 335 Protein Sequence Protein Accession #: AAH08826						
	1	11	21	31	41	51	
	MTTLAGAVPR	MRRPGPGQNY	PRSGFPLEVS	TPLQGRVNO	LGGVPIGRNP	LPNHIRHKIV	60
	EMAHGIRPC	VISRQLRVSH	GCVSKILCRY	QETGSIRPGA	IGGSKPKVTT	PDVEKKIEEY	120
	KRENPGMFSW	EIRDKLLKDA	VCDRTNTPSV	SSISRLRSK	FGKGEEEDAD	LERKEAESE	180
	KKAHSGDGI	LSEASAPQS	DEGSDIDSEP	DLPLKRQRR	SRITFTAEQL	EELERAFERT	240
75	HYPDITREE	LAQRAKLTEA	RVQVMFSNR	ARWRKQAGAN	QLMAFNHLIP	GGFPPTAMPT	300
	LPTYQLSETS	YQPTSIQAV	SDPSSTVHRP	QPLPSTVHQ	STIPSNPDSS	SAYCLPSTRH	360
	GFSSYTSDFV	PPSGPSNPMN	PTINGNLSPO	NSIRHNLSLH	SKPIRVQNEG	TGKSSMMMLN	420
	PEGGKSGKSP	RRRAASMDNN	SKPAKRSRA	AKKASLQSG	QEGAGDSPGS	QFSKWPASPG	480
	SHSNDQFDM	STFRPTSSN	ASTISGRSLP	IMTEQDLIGE	GDVHSMVYPP	SAAKMASTLP	540
80	SLSEISNPN	MENLNDLNL	LSSPTSLTVS	TQSSPGTHMQ	QTPCYSFAPP	NTSLNSPSPN	600
	YQKTYTGQSS	MSPLPQMPIQ	TLQDNKSSYC	GMSQYNCAPO	LLKELLTSDS	PPHNDIMTPV	660
	DPGVAQPNRS	VLQGNVMGPG	NSVMSTYGSQ	ASHNKNQNP	SHTRPHGAQQ	TSAVNCRPLP	720
	HTVSTMPTS	GHNRLTVQKT	PVQVPLPHPM	QMSALGGYSS	VSSCNQYGRM	GLLHQEKLP	780
	DLDGMFIERL	DCDMESIIRN	DLMDGDTLOF	NFDNVLNQS	FPHSVKTTTH	SWVSG	835

Seq ID NO: 336 Protein Sequence  
Protein Accession #: NP\_005752.1

	1	11	21	31	41	51	
5	MEVSRKAPP	RPPRPAAPLP	LLAYLLALAA	PGRGADEPVM	RSEQAIGAIA	ASQEDGVFVA	60
	SGSCLOLDY	SLEHSLRLV	RDQAGNCTEP	VSLAPPARPR	PGSFSKLLL	PYREGAAGLG	120
	GLLLTGWTFD	RGACEVRPLG	NLSRNSLRNG	TEVVSCHPQG	STAGVVYRAG	RNNRWYLAVA	180
	ATYVLPEPET	ASRCNPAASD	HDTAIALKDT	EGRSLATQEL	GRKLCEGAG	SLHFVDAFLW	240
10	NGSIYFPYYP	YNYTSGAATG	WPSMARIAQS	TEVLPQQQAS	LDCGHGHPDG	RRLLSSSLV	300
	EALDVWAGVF	SAAAGEGQER	RSPTTALCL	PRMSEIARA	KRVSMDFKTA	ESHCKEGDQP	360
	ERVQPIASST	LHSDLTSTV	GTVMNRTVL	FLGTGQGLL	XVILGENLTS	NCPEVIYEIK	420
	EETPVFYKLV	PDPVNIYIY	LTAGKEVRII	RVANONKHKS	CSECLTATDP	HCGWCHSLQR	480
	CTFGQCVHS	ENLEWLDIS	SGAKKCPKII	IIRSSKEKTT	VTVGVSFSPR	HSCQWNVVD	540
15	SSRELQNK	QPNRTCTCSI	PTRATYKDS	VWVMSFSGS	WNLSDRFNFT	NCSSLKECPA	600
	CVETGCAMCK	SARRCIHFT	ACDPSDIERN	QEOCFVAVEK	TSGGGRPKEN	KGNRTNQALQ	660
	VFIKSIIEPQ	KVSTLGKSNV	IVTGANPTRA	SNITHILKGT	STCDKDVQV	SHVINDTHMK	720
	FSLPSSRKEM	KDVCIQFDGG	NCSSVGLSY	IALPHCSLIF	PATTWISGQV	NITWGRNFD	780
	VIDNLIIHSE	LKGNINVSEY	CVATYCGFLA	PSLKSSKVRT	NVTVKLRVQD	TYLDCGTLQY	840
20	REDPRFTGVR	VESEVDTELE	VKIQKENDNF	NISKDIEIT	LPHGNGQLN	CSFENITRNG	900
	DLTILCKIK	GIKTASTIAN	SSKKVRVKLG	NLELYVEQES	VPSTWYFLIV	LPVLLVIVIF	960
	AAVGVTRHKS	KELSRKQSQQ	LELLESELRK	EIRDGPAELQ	MDKLDVVDSP	GVVFLDYKH	1020
	FALRTFFPES	GGTTHIFTED	MDNRDANDKN	ESLTALDALI	CNKSLFVTVI	HTLEKQKNFS	1080
	VKDRLPASF	LTIAIQTCLV	YLTSLILEVT	RDLMQCSNM	QPKMLLRTE	SUVEKLLTNW	1140
25	MSVCLSGFLR	ETVGEFFYLL	VTTLNQKINK	GPVDVITCKA	LYTLNEDWLL	WQVPEFSTVA	1200
	LNVVFEKIPK	NESADVCRNI	SVNVLDCDTI	GOAKEKIFQA	FLSKNGSPYG	LQNLNIGLEL	1260
	QMGTRKELL	DIDSSSVILE	DGITHLNTIG	HYEISNGSTI	KVFKKIANPT	SDVEYSDHHC	1320
	HLILPSEAF	QDVQGRHRG	KHKFKVKEMY	LTLLSTKVA	IHSVLEKLPK	SIWLSPLNSRA	1380
	PPAIKYFPF	LDAQENKKI	TDPDVVIHWK	TNSLPLRFVW	NILKNPQFVF	DIKKTPHIDG	1440
30	CLSVIAQAFM	DAFSLTEQQL	GKEAPTNNLL	YAKDIPTYKE	EVKSYKAIK	DLPLSSSEM	1500
	EEFLQESKK	HENEFNEEVA	LTEIYKIYK	YFDEILNKLE	RERGLEAOK	QLLHVXVLPD	1560
	EKKCKCKM						1568

Seq ID NO: 337 Protein Sequence  
Protein Accession #: XP\_063670.1

	1	11	21	31	41	51	
35	MQRILEPAD	DCTWSTRILL	TLSEFIMSLQ	RTVYPHSEKW	RALSVPSSTY	FOELVQTSQE	60
	LALTFWHLLS	MFGFFIVSYG	FLTAFGRITL	HLDLQPNLT	PSRFDKTYGL	FIYEIEGDDL	120
40	DPCFQSMVQG	LLEVLMHMKV	ESAYHTNDGD	TAGEGVNGT	SQTRGGGGAA	RSRCREWEPE	180
	TPPEVYVDVD	KGLTLACFVF	LCLFLVVMII	RCAKVIMDPY	SAIPTSTWEE	QHLLD	235

Seq ID NO: 338 Protein Sequence  
Protein Accession #: FGENSEH predicted

	1	11	21	31	41	51	
45	MEPSHSQPTM	DMKRMQERPA	ASPLKQDGR	GSAQSPLSAA	GPSPAPLGA	LTPAEPGLGS	60
	APRAPRARAP	VTGRRSRRS	AVAGLSAPAQ	PGPRERTGRA	SPALENNSDL	LSKASAIATG	120
	TPPCEDSTIA	RFYLPPLTT	HPELVGTSQE	LALTFWHLLS	MFGFFIVSYG	FLTAFGRITL	180
50	HLDLQPNLT	PSRFDKTYGQ	LLELPVHSKY	VLTIHWSQGL	CIWSSHPCEA	GVENGTSQTR	240
	GGGGAARSRC	REMEETPEPE	VYVDVKGLT	LACFVFLCLF	LVMVIRCAK	VIMDPYSAIP	300
	TSTWEEQHL	D					311

Seq ID NO: 339 Protein Sequence  
Protein Accession #: FGENSEH predicted

	1	11	21	31	41	51	
55	MGKDFNSKTP	KAMATQAKID	KWDLIKLSK	CTAKETTIRV	NROPTWEKI	FAIYSSDEGL	60
	ISRIYNEPKQ	IYKKKTNNPI	NKWKADNNRH	PSKEDIYAAN	RHMKKCSSSL	AIRENQIKTT	120
	TRCHLTPVRM	AIKKSGNNR	TAEQPKLRK	EAVGSIEIFR	FADGLDITLM	ILGILASLVN	180
60	GACPLPPLV	LGEMSDNLIS	GCLVQNTTN	YQNCQSQEK	LNEDMTLLT	YVVGIGVAAL	240
	IFGVQISLM	IITAARQTKR	IRKQFFHSVL	AQDIGHFDS	DIGELNTRMT	DDIDKISDGI	300
	GDKIALLFQN	MSTPSIGLAV	GLVKGWKLTL	VTLSLSPIM	ASAAACSRNV	ISLTSKELSA	360
	YSKAGAAVEE	VLSSTIRTVIA	FRAQEKEQLR	YTONLDAKD	FGIKRTIASK	VSLGAVVFFM	420
65	NGTYGLAFMY	GTSLILNGEP	GYTIGTVLAV	FFSVIHSSYC	IGAAPHFET	FAIARGAAPH	480
	IFQVIDKKPS	IDNFSTAGYK	PESIEGTVEF	KNVSFNYPSR	PSIKILKGLN	LRIKSGETVA	540
	LVGLNGSGKS	TVVQLLQRLY	DPDDGFIMVD	ENDIRALNVR	HYRDHIGVYS	QEPVLFGTI	600
	SNINIKYGRD	VTDEEMERAA	REANAYDFIM	EPFNKFNLT	GEKGAQMSG	QKQRIATARA	660
	LVRNPKLIL	DEATSALDSE	SKSAVQAAL	KDTPRYSF			698

Seq ID NO: 340 Protein Sequence  
Protein Accession #: XP\_166496.1

	1	11	21	31	41	51	
70	MVDENDIRAL	NVRHYRDHIG	VVSQEPVLF	TTISNNIKYG	RDDVTDEEME	RAAREANAYD	60
75	FIMEFPNKNF	TLVGEKGQAM	SGGQKQRIAI	ARALVRNPKI	LILDEATSAL	DSEKSAVQA	120
	ALEKDTPRYS	F					131

Seq ID NO: 341 Protein Sequence  
Protein Accession #: XP\_166305.1

	1	11	21	31	41	51	
80	MEKPRAVLDL	HVKHHSALGY	GLVTLTLAGG	ERIFSAAVAF	CPCSAAMNLP	YGLVFLVPA	60
	LALFLGYYVL	SARTWRLLTG	CCSSARASCG	SALRGSLVCT	QISAAAALAP	LTWVAVALLG	120
	GAFYECAATG	SAFAQRCLCL	GRNRSAAEL	PLVPCNQAKA	SDVQDLKDL	KAQSQVLGWI	180



	LIADVIIILL IFTSVTRCLS PVSFLQLKFW KIYLEQEQQI LKSKATEHAT ELAKENIKCF	240
	FEQSHPKENY TPSMKENQOI SSLYTFNPKG QYYSMLHKYV NRKEKTHSIR STEGDTVIPV	300
	LGFDSSGIN STEPL	315
5	Seq ID NO: 342 Protein Sequence Protein Accession #: NP_115587.5	
	1 11 21 31 41 51	
	MARSPPATLF LFLLLLGQPP PSRPQSLGTT KLRLVGPESK PEEGRLEVLH QQNGTVCDD	60
10	NFAIQEATVA CRQLGFEEAL TWAHSAKYQG GEGPIWLDNV QCVGTESSLD QCGSNGMGVS	120
	DCSHSEIDVGV ICHPRRHRYG LSETVSNALG PQGRRLEEVK LKPIILASAKQ HSPVTEGAVE	180
	VKYEGHMRQV CDQGWTHWNS RVVCGMLGFP SEVPVDSHYI RKVMDLMDRD PKSRLLKSLTN	240
	KNSFWIHQVT CLGTEPHMAN CQVQVAPARG KLRPACPGGM HAVVSCVAGP HFRPPTKPKQ	300
	REGSWAEERP VRLRSGAQVG EGRVEVLNMR QMGTVCDHRW NLISASVVCV RLVNMGFQNO	360
15	LFGARLQOGL GPIHLSVRC RGVETLSDC PALEGSQNGC QHENAASVVC NVNMGFQNO	420
	VRLAGGRIFE EGLLEVQVEV NGVPRMGVSC SENWGLTEAM VACRQLGLGF AIHAYKETWF	480
	WSGTTPRAQEV VMSGVRCSTG ELALQCCQRH GPVHCSTGGG RFLAGVSCND SAPDLVWNAQ	540
	LQVETAYLED RPLSQLCAH EENCLSKSAD HMDWPYGYRR LLRFSTQIYN LGRTDFRPKT	600
20	GRDSMWVHQC HRHYHSIEVF THYDLLTLNG SKVAEGHKAS FCLEDTNCFP GLQRRYACAN	660
	FGGQGVTVCC WDTYRHDIDC QWVDITDVG GNYIFQVIVN PHYEVAESDF SNMLQCRCK	720
	YDGRHVLNHN CHTGNSYPAN AELSLEQQR LRNNLI	756
	Seq ID NO: 343 Protein Sequence Protein Accession #: NP_001789.2	
25	1 11 21 31 41 51	
	MENFQKVEKI GEGTYGVVYK ARNKLTGEVV ALKKIRLDTE TEGVPSTAIR EISLLKELNH	60
	PNIVKLLDVI HTENKLYLVF EFLHQDLKFP MDASALTGIP LPLIKSYLFQ LLQGLAFCHS	120
30	HRVLIRDLKP QMLLIINTEGA IKLADFLGAR AFGVPPVTTY HEVVTLMYRA PEILLGCKYF	180
	STAVDMSLG CIPAEWTRR ALFPGDSEID QLFRIPTLGP TPDEVVMPGV TSMPPYKPSF	240
	PKMARQDFSK VVPPLDEGR SLLSQMLHYD PNKRISAKAA LAHPFFQDVT KVPVHLRL	298
	Seq ID NO: 344 Protein Sequence Protein Accession #: NP_439892.1	
35	1 11 21 31 41 51	
	MENFQKVEKI GEGTYGVVYK ARNKLTGEVV ALKKIRLDTE TEGVPSTAIR EISLLKELNH	60
	PNIVKLLDVI HTENKLYLVF EFLHQDLKFP MDASALTGIP LPLIKSYLFQ LLQGLAFCHS	120
40	HRVLIRDLKP QMLLIINTEGA IKLADFLGAR AFGVPPVTTY HEVVTLMYRA PEILLGCKYF	180
	IFRTLTGDE VVMPGVTSMP DYKPSFPKWA RQDFSKVVPV LDEGRSLLS QMLHYDPYKR	240
	ISAKAALHP FQDVTKPVP HLRL	264
	Seq ID NO: 345 Protein Sequence Protein Accession #: NP_116127.1	
45	1 11 21 31 41 51	
	MKLGCVLMAV ALYLSLGLVM VAQMLLAASF ETLQCEGPVC TEESCHTED DLTDAEAGF	60
	QVKAYTFSEP FHLIVSYDNL ILQCPAKPVP EGDLLVLRQV AMQDWPLTQV TFPYRDSALG	120
50	PPGPNREFSI TVQKADSGH YHCSGIPQSP GPGIPETASV VAITVQELFP APILRVPSA	180
	EPGAGSPMTL SCQTKLPLQR SAARLLPSFY KDGRIVQSRG LSSEFOIPTA SEDHSGSYNC	240
	EAATEDNQVW KQSPQLRIV QGASSSAAPP TLNPAPQKSA APGTAPEAP GPLPPPTFS	300
	SEDPGFSPL GMPDPHYHQ MGLLLKQMD VRVLLGHLIM ELRELSGHQK PCTTKATAE	359
55	Seq ID NO: 346 Protein Sequence Protein Accession #: NP_002337.1	
	1 11 21 31 41 51	
	MKIFLPVLLA ALLGVERASS LMCFSCLNQK SNLYCLKPTI CSDQDNYCVT VSASAGIGNL	60
60	VTFGHLSLST CSPACPIPEG VNVGVASMG I SCCQSFCLNF SAADGGLRAS VTLGAGLLL	120
	SLLPALLRFG P	131
	Seq ID NO: 347 Protein Sequence Protein Accession #: XP_113526.2	
65	1 11 21 31 41 51	
	MEDLGENTMV LSTLRSLNMF ISQRVEGSG LDISTSAPGS LQMYYQSSMQ LEERAQIRS	60
	KSHLIQVERE KMOMELSHKR ARVELERAAS TSARNYEREV DRNQELLTRI RQLQEREAGA	120
	EEKMQEQLER NRQCQNLDLA ASKRLREKED SLAQAGETIN ALKGRISELQ WSVMDQEMRV	180
70	KRLSEKQEL QEQDLQHKK CQEAQKIQE LQASQEARAD HQQIKOLEQ KLSLQEQDAA	240
	IVKMKSELV RLPRLRELK QLREESAHLR EMRETNLLQ EELEGLQRLK GRQEKMQETL	300
	VGLELENERL LAKLQSWERL DOTMGLSIRT PEDLSRFVVE LQRELALKD KNSAVTSSAR	360
	GLEKARQQQL EELRQVSGQL LEERKKRETH EALARRLQKR VLLTKERDQ MRAILGSYDS	420
	ELTPAESYSP LTRRMREAEV MVQKVHSHA EMEAQLSQAL EELGGQKQRA DMLENELKML	480
75	KSQSSSAEQS FLPSREEADT LRLKVEELEG ERSRLSEEKR MLEAQLERRA LQGDYDQSR	540
	KVLHMSNPT SVARQLRED HSQQAECER LRGLLRAMER GTVTPADLEA AAASLPSSKE	600
	VAELEKQVES AELKQRLKE VFQTKIQEPR KACYTLTGQ IDITTENQYR LLSLYAEHPG	660
	DCLIKATSP SGSKMQLLET EFSHTVGELI EVHLRRQDSI PAFLLSLTLE LFSRQTVA	718
80	Seq ID NO: 348 Protein Sequence Protein Accession #: NP_000264.1	
	1 11 21 31 41 51	
	MTQAGRRPGC TPSPRPRTQP MASPRLGTFC CPTRDAATQL VLSFQPRAPH ALCLSGGLR	60
	LALGLLQLLP GRRPAGPGSP ATSPPASVRI LRAAAACDLG GCLGMVIRST VMLGFPNFVD	120

5 SVSDMNHTEI WPAAPFCVGS MWIQLLYSAC FHWLFCYAVD AYLVRIRRSAG LSTILLYHIM 180  
 ANGLATLLCV EGAAMLYYPS VSRCEGLDH AIPHYVTMYL PLLLVLVANP ILFQKVTAV 240  
 ASLLKGRQGI YTENRRMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGGS 300  
 LKPVRTAAKT TWFIMGILNP AQGFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA 360  
 HPSPLMPHEN PASGKVSQVG QOTSDEALSM LSEGSASTI EIHTASESCN KNEGDPALPT 420  
 HGD L 424

Seq ID NO: 349 Protein Sequence  
 Protein Accession #: NP\_647478.1  
 10 1 11 21 31 41 51  
 | | | | |  
 MGPKDSAKCL HRGPQPSHWA AGDGPQERC GPRSLGSPVL GLDTCRAWDH VDGQILGQLR 60  
 PLTEEEEBEG AGATLSRGPA FPGMGSEELR LASFYDWPLT AEVPPPELLAA AGFFHTGHQD 120  
 KVRCCFFCYGG LQSWKRGDDP WTEHAKWPPS CQFLLRKSKGR DFVHSVQETH SOLLGSDWDPW 180  
 15 EEPEDAAPVA PSVPASGYPE LPTPRREVQS ESAQEPGGVS PAEAQRAHWV LEPPGARDVE 240  
 AQLRRLQEER TCKVCLDRAV SIVFVPGHIL VCAECAPGLQ LCPICRAPVR SRVRTFLS 298

Seq ID NO: 350 Protein Sequence  
 Protein Accession #: NP\_071444.1  
 20 1 11 21 31 41 51  
 | | | | |  
 MGPKDSAKCL HRGPQPSHWA AGDGPQERC GPRSLGSPVL GLDTCRAWDH VDGQILGQLR 60  
 PLTEEEEBEG AGATLSRGPA FPGMGSEELR LASFYDWPLT AEVPPPELLAA AGFFHTGHQD 120  
 KVRCCFFCYGG LQSWKRGDDP WTEHAKWPPS CQFLLRKSKGR DFVHSVQETH SOLLGSDWDPW 180  
 25 EEPEDAAPVA PSVPASGYPE LPTPRREVQS ESAQEPGGVS PAEAQRAHWV LEPPGARDVE 240  
 AVSIVFVPGS HLVAECAPG LQLCPICRAP VRSRVRTFLS 280

Seq ID NO: 351 Protein Sequence  
 Protein Accession #: NP\_066300.1  
 30 1 11 21 31 41 51  
 | | | | |  
 MGSVSSLISG HSFSKHCRA SQYKLRKSSH LKILNRYSDG LLRFGFSQDS GHGKSSSIOMG 60  
 KSEDDFFIYKV SQKARGSHHP DYTALSSGDL GQAGVDFDP STPPKLMPPS NQLEMGSEKG 120  
 AVRPTAFKPV LPRSGAILHS SPESASHQLH PAPDKPKKEQ ELKPGCLCSGA LSDSGRNSMS 180  
 35 SLPTHSTSSS YQLDPLVTPV GPTSRFGCSA HMITQGIIVLQ DSNMMSLKAL SPFGGSGKLQ 240  
 HSNKADKGPS CVRSPISTDE CSIQELEQKL LEREGALQKL QRSFEEKELA SSLAYEERPR 300  
 RCDELEGP PKGKNLQQA SQKSQRAQV LHLQVLQLOQ EKRQLRQELE SIMKEQDLLE 360  
 TKLRSYEREK TSFGPALEET QWEVCQKSGE ISLLKQQLKE SQTEVNAKAS EILGLKAQLK 420  
 40 DTRGLKLEGE LRTQDLEGAL RTKGLELEVC ENELQRKKEE AELLREKYNL LEQELQELRA 480  
 QALARDHGP PTFPEDVPAL QRELERLRAE LRERQGHQD MSSGFQHERL VMKEEKERV I 540  
 QYQKQLQSY VAMYQRNQLR EKALQQLARG DSAGEPLEVD LEGADIPYED IATEI 596

Seq ID NO: 352 Protein Sequence  
 Protein Accession #: AAG41361.1  
 45 1 11 21 31 41 51  
 | | | | |  
 MPKNSKVVR ELDDDVTSV KDLLSNEDAA DOAFKTSCLI VDGQEEKDID VEEGSEVEDE 60  
 RPAWNSKLQY ILAQVGSVG LGNVWRFPYL CQKNGGGAYL LPYLILLMVI GIPLFFLELS 120  
 VQQRIRRSI GVMNYSPLK GGIGFASCVV CYFVALYVW IIGWSLFPYS QSQOPLPMD 180  
 50 GCLVKNASH TFVEPECEQS SATTYWYRE ALNISSISE SGGALWMTI CLLAAMVMVC 240  
 LAMIKQISS GKIIYFSSLF PYVVLICFLI RAFLLNGSID GIRHMTFKL EIMLEPKVVR 300  
 EAATQVFFAL GLGFGGVIAF SSYNKRDNNC HFDVAIVSPI NFFTSVLATL VVFAVLGFLA 360  
 NVINEKICIT NSETIMKFLK MGNISQDIIP HHINLSTVTA EDVHLVDYII QKVKEEFPA 420  
 55 LHLNSCKIEE ELNKAAGQGT LAFIAPTEAM THFPASPFWV VMFFLMVLNL GIGSMFGTIE 480  
 GIVTPIVDTP KVRKEILTIV CCLLAFICGL IFVQRSGNYF VTFDDYSAT LPLLIVVILE 540  
 NIACVFPYGI DKFMECLKDM LGFAPSRYYY YMKYISPLM LLSLLIASV NMGLSPPGYN 600  
 AWIEDKASEE FLSYPTMGLV VCVSLVVFAL LPVPVPIVR RPNLIDSSG NLASVTTYRK 660  
 RVLKEPVNLE GDDTSLHKG IPSEMPSPNF GKNYIRKQSG SPTLDTAPNG RYIGIYLMAD 720  
 60 IMPMPESDL 730

Seq ID NO: 353 Protein Sequence  
 Protein Accession #: NP\_005594.1  
 65 1 11 21 31 41 51  
 | | | | |  
 MEEGERSPLL SQTAGQKPL SVHRPPTSGC LGPVVPREDQA EAMGSCCPCP ETKHQALSQT 60  
 PKKGAPSLG PGSSCVKYL FLSNFPFSL LLLALAIGLW GLAVKGSLSG DLGGPLPTDP 120  
 MGLALAGLV VSAASLAGCL GALCENTCLL RGFSGGILAF LVLEAVAGAL VVALWGPLQD 180  
 SLEHTLRVAI AHYQDDPDLR FLDDQVQLGL RCGAASYQD WQQLYFNCS SPGVQACSLP 240  
 70 ASCCIDPRED GASVNDQCGF GVLRDADAA QVVVYLEGCG PPLRRWLRAN LAASGGYATA 300  
 VVLLQGAELL LAARLLGALA ARSAAAYGPG AHGEDRAGPO SPSPGAPPAA KPARG 355

Seq ID NO: 354 Protein Sequence  
 Protein Accession #: AAL84622.1  
 75 1 11 21 31 41 51  
 | | | | |  
 MADPEVVVSS CSSEEEENRC NFNQQTSPSE ELLLEDQMRK KLKFFFMNCP EKFWARGRKP 60  
 WKLAIQILKI AMVTIQVLVLF GLSNQMVVAF KEENTIAFKH LFLKGYMDRM DDTYAVYTQS 120  
 DVDYQLIFAV NQYLQLYNVV VGNHAYENKG TKQSAMAICQ HFYKRGNIYP GNDTFDIDPE 180  
 IETECFFVPE DEPHIGTPA ENKLNLTDF HRLLTVELQF KLKAINLQTV RHOELPDCYD 240  
 80 FTLTITFDNK AHSGRKISL DNDISIRECK DWHVSGSIQK NTHYMMIFDA FVILTCLVSL 300  
 ILCIRSVIR LQLQOEPMVF FLLHYKKEVS VSDQMEFVNG WYIMIIISDI LTIIGSILKM 360  
 EIQAISLTSY DVCISILLGTS TMLVWLGVIR YLGFFAKYNL LILTQAALP NVIRFCCCAA 420  
 MYLGYCFPG MYLGPYHDK FRSLAMVSEC LFSLINGDDM FATFAKMQQK SYLVWLFSRI 480  
 YLVSFISLPI YMLSLFLIAL ITDTYETIKQ YQDGFPETE LRTFISECKD LPNSGKYRLE 540

DDPPVSLFCC CKK

553

Seq ID NO: 355 Protein Sequence  
Protein Accession #: NP\_000105.1

5	1	11	21	31	41	51	
	MEPGLWLLFG	LTVTSAGFV	PCSQSGDAGR	RGVSQAPTAA	RSEGDCEETV	AGPGEETVAG	60
	PGEETVAPTA	LQGPSGSPG	QEQAAEGAPE	HHRSSRCTCP	TYKDKCEVYV	CHLDIIWINT	120
	PEQTVFYQLS	NVRGSPRGKR	SAGPLPGNLQ	LSHRPHLRCA	CVGRYDKACL	HFCTQTLQVS	180
10	SNRTAEKTD	KEEKGKVEVK	DQSKQALDL	HHPKLMPGSG	LALAPSTCPR	CLFQEGAP	238

Seq ID NO: 356 Protein Sequence  
Protein Accession #: NP\_005347.2

15	1	11	21	31	41	51	
	MGCGSSSHPH	DDMMENIDVC	ENCHYPIVPL	DGKGTLLIRN	GSEVRDPLVT	YEGSNPPASP	60
	LQDNVLIALH	SYEPSHDGL	GFKEGEPRLI	LEQSGEMWKA	QSLTTQEGF	IPFNFVAKAN	120
	SLEPEPWFFK	NLSRKAERQ	LLAPGNTHGS	FLIRESESTA	GSFSLSVRDP	DQNGQEVVHK	180
	YKIRNLONG	FYISPRITFP	GLHELVRHYT	NASDGLCTRL	SRPCQTKXPQ	KPWWEDEWEV	240
20	PRETLKLVET	LGAGQPGEVW	MGYYNGHTKV	AVKSLKQGSN	SPDAFLAEAN	LWKQLQHQRL	300
	VRLYAVFTQS	PIYIITEYME	NGSLVDLTKT	PSGIKLTINK	LLDMAAQIAE	GMAPIEERNY	360
	IHRDLAANA	LVSOTLSCKI	ADPGLARLIS	DNEYTAREGA	KFKIKWTAPE	AINYGTFTIK	420
	SDVHSGILL	TEIVTHGRIP	YPCMTNPEVI	QNLERGVRMV	RPDNCPEELY	QLMRCLKWER	480
25	PEDRPTFDYL	RSVLEDFFTA	TEGQYQPOP				509

Seq ID NO: 357 Protein Sequence  
Protein Accession #: NP\_055469.1

30	1	11	21	31	41	51	
	MAIAYLGSSC	PSQPPSSIAL	SLSPTPSDFE	QESGIETAMR	FSPDVALAVS	TTPAVLPTTN	60
	IQPVGTPEEE	LPSEPTPLTE	ATSPVLVTEV	PEEPSQRATT	VSTTMATTA	TSTGDPVTAT	120
	VPATVATATP	STPAAPPTTA	TTAVIRTTGV	RRLPLPLTT	VATARATTPE	APSPPTTA	180
	LDTAPTPRL	VSTATSPRA	LPRPATTOEP	DIPERSTLPL	GTTAPGPTVE	AQTPTPETFL	240
	TTIRDEPEVP	VSGGSGDPE	LPEEETTOPD	TANEVAVVGG	AAKASSPPG	TLPRGARPGP	300
35	GLLDNAIDSG	SSAAQLPKQS	ILERKEVLVA	VIVGGVVGAL	FAAFLVTLII	YRMKKKDEGS	360
	YTLPEPKQAS	VTYQKPKQKE	EFYA				384

Seq ID NO: 358 Protein Sequence  
Protein Accession #: NP\_008848.1

40	1	11	21	31	41	51	
	MYGNYSHFMK	FPAGYGGSPG	HTGSTMSMPS	AALSTGKPHD	SHPSYTDTPV	SAPRTLSAVG	60
	TPLNALGSPY	RVITSAMGPP	SGALAAPPGI	NLVAPPSSQL	NVNVSVSSSE	DIKPLPLGPG	120
	IGNMYNPTST	PGSLVKHICA	ICGDRSSGKH	YGVYSCGCKK	GPFKRTIRKO	LIYTCRDNKD	180
45	CLIDKQRQR	QCYCRYQKCL	VWQMKREAVQ	EERQSRERA	ESEAECATSG	HEDMPVERIL	240
	EALAVPEPT	ESYGDMMNEN	STNDPVTNIC	HAADKQLFTL	VEWAKRIPHP	SDLTLEDQVI	300
	LLRAGMNEEL	IASFSHRVS	VQDGILLATG	LHVNRSSAHS	AGVGSIFDRV	LTELVSOMKD	360
	MMQDKSELGC	LRAIVLPNPD	AKGLSNPSEV	ETLREKVYAT	LEAYTKQKYP	EQPGRFAKLL	420
50	LRLPALRSIG	LKCLEHLFFF	KLIGDTPIDT	FLMENLETPL	QIT		463

Seq ID NO: 359 Protein Sequence  
Protein Accession #: NP\_002176.1

55	1	11	21	31	41	51	
	MTILGTFPGM	VFSLQVVS	ESGYAQNGDL	EDAEIDDYSP	SCYSQLEVNG	SQHSILTCAFE	60
	DDVNTTNLE	FEICGALVEV	KCLNPRKLQE	IYFIETKKPL	LIGKSNICVK	VGEKSLTCKK	120
	IDLTITVYKE	APFDLSVIYR	EGANDFVVT	NTSHLQKKYV	KVLMHDVAYR	QEKDENKWT	180
	VNLSTKLTL	LQRKLQPAAM	YEIKVRSIPD	HYFKGFWSEH	SPSYFRTPE	INNSSGEMDP	240
	ILLTISILSF	FSVALLVILA	CVLNKKRIKP	IVWPSLPDHK	KTLEHLCKPK	RKNLVSVFNP	300
60	ESFLDCQIHR	VDDIQARDEV	EGFLQDTFPQ	QLEESEKQRL	GGDVQSPNCP	SEDVVVTPE	360
	FGDRSSITCL	AGNVASCDAP	ILSSRSRLDC	RESGKNGPHV	YQDLLLSLGT	TNSTLPPPPS	420
	LQSGILTLNP	VAGQQPILTS	LGSNQEEAYV	TMSSFYQNG			459

Seq ID NO: 360 Protein Sequence  
Protein Accession #: NP\_006263.1

65	1	11	21	31	41	51	
	MSELEKAMVA	LIDVPHQYSG	REGDKHKLKK	SELKELINNE	LSHFLEEIKE	QEVVDKVMET	60
70	LNDGDGEC	QEFMAFVAM	VTTACHEFFE	HE			92

Seq ID NO: 361 Protein Sequence  
Protein Accession #: NP\_006148.1

75	1	11	21	31	41	51	
	MPMDLILVVV	FCVCTARTVV	GFGMDPDLQM	DIVTELDLVN	TTLGVAQVSG	MGNASKAFLF	60
	QDIEREINAA	PHVSEKLIQL	FQNKSEFTIL	ATVQKPKSTS	GVILSIRELE	HSYPELESSG	120
	LRDEIRYHYI	HNGKPRTEAL	PYRMADGQWH	KVALSVSASH	LLLVDCNRI	YERVIDPPDT	180
80	NLPPGILNML	QQRNQKHGLP	KGIIQDGKII	FMPNGYITQC	PNLNHTCPTC	SDFLSLVQGI	240
	MDLQELLAKM	TAKLNVAEFR	LSQLENCHCE	KTCQVSGLLY	RDQDSWVDGD	HCRNCTCKSG	300
	AVECRRMSCP	PLNCSPPSLP	VHIAQCCCKV	CRPKCIYGGK	VLABGQRILT	KSCRECRGGV	360
	LVKITMCP	LNCSEKHIL	PENQCCRVCR	GHNPCAEGPK	CGENSECKNW	NKATCECKS	420
	GYISVQGD	YCEDIDECAA	KMHYCHANV	CVNLPGLYRC	DCVPGYIRVD	DFSCTEHDEC	480

5	GSQHNCDEN AICTNTVQGH SCTCKPGYVG NGTICRAFCE EGCYGGTCV APNKCVCPSG	540
	FTGSHCEIDI DECSEGIIEC HNHSRCVNLPGWYHCECRSG FHDDGTYSLS GESCIDIDEC	600
	ALRTHTCWND SACINLAGGP DCLCPSPGSC SGDCPHEGGL KHNGQVWTLK EDRCSVCSC	660
	DGKIFCRRTA CDCQNPASDL FCCPECOTRV TSQCLDQNGH KLYRSGDNWT HSCQCCRCLE	720
	GEVDCWPLTC PNLSCETAI LECECCPRCV SDPCLADNIT YDIRKTCLDS YGVSRISGSV	780
	WTNAGSPCTT CKCKNGRVCC SVDFECLQNN	810
	Seq ID NO: 362 Protein Sequence	
	Protein Accession #: NP_057264.1	
	1 11 21 31 41 51	
	MGSSNQAGR HIYKSLADDG PFDSVEPPKR PTSRLIMHSM AMFGREPCYA VEAAVYTPVL	60
10	LSVGLPSSLY SIWFLSPIL GFLLPVVGS ASDHCRSRWG RRRPYILTLG VMMLVGMALY	120
	LNGATVVAAL IANPRRLVW AISVTMIGVV LFDFAADFID GPIKAYLFDV CSHQDKEKGL	180
	HYHALFTGPG GALGYLIGAI DMAHLELGR LGTEFQVMPF PSALVLTLCF TVHLCSISEA	240
	PLTEVAKGIP PQOTQDDPPL SSDGMYEYGS IEKVNGYVN PELAMQGAQN KNHAEQTRRA	300
	MTLKSLLRAL VMMPHYRYL CISHLIGWTA FLSNMLPFTD FMGQIVYRGD PYSAHNSTEF	360
15	LIYERGVEVG CWGFCINSVP SSLSYFQKV LVSYIGLKGL YFTQYLLFQL OTGPIGLFPN	420
	VYSTLVLCGL FGVMSTLYT VFFNLITEYH REEEKERQQA PGDPDMSVR GKGMDCATLT	480
	CNQLAQILV GGGGLFLVNT AGTVVVVIT ASAVALIGCC FVALFVRVVD	530
	Seq ID NO: 363 Protein Sequence	
	Protein Accession #: NP_036532.1	
20	1 11 21 31 41 51	
	MELALLCGLV VMAGVIPIQG GILNINQVVK QVTGKMPILS YMPYGCCHGL GGRQGPQDAT	60
	DMCCQTHDCC YDHLKTQGCS IYKDYRYNRF SQGNHICSDK GSWCEQLCA CDKEVAPCLK	120
	RNLDTYQKRL RPYMRPHCRG QTPGC	145
	Seq ID NO: 364 Protein Sequence	
25	Protein Accession #: NP_061313.1	
	1 11 21 31 41 51	
	MRLPOLRPMT SLLLVDAALL MLLQGLPGLT LPOGLPGLML EGTLRIGGLW GLLKLRLGLG	60
	FVGTLLPLC LATPLTVSLR ALVAGASRAP PARVASAPMS MLLVGYGAAG LSWSLMAVLS	120
	PPGAQEKEQD QVNNKVLMMR LLKLSRPDLF LLVAFFFLV LAVLGETLIP HYSGRVIDIL	180
30	GGDFDPHAFSAIIFMCLFS FGSSLSAGCR GGCFTYTHSR INLRIREQLF SSLLRQDLGF	240
	FQETKTGELN SRLSSDTLM SNMLPLANAY LLRSLVKVVG LYGMLSISIP RLTLSSLRHM	300
	PFTIAAEKVY NTRHQEVLRE IQDAVARAQ VVREAVGGLQ TVRSFGAEH EVCRYKEALE	360
	QCRLYWRRD LERALLYLIR RVLHLGVQML MLCGLQMQM DGELTQGSLL SFMIYQESVG	420
	SYQTVLVYIY GDMLSNVGAA EKVSFMDRQ PNLSPGTLA PTLQGVVKF QDVSPAYPNR	480
35	PDRPVLKGLT FTLRPGEVTA LVGPNNGSKS TVAALLQNLV QPTGQVLLD EKPISQYEH	540
	YLHSQVSVG QEPVLPSSGV RNNIAYGLQS CEDDKVMMAA QAARADDFIQ EMEHGIYTDV	600
	GEKGSQLAAG QKQRLAARA LVRDPRVLIL	630
	Seq ID NO: 365 Protein Sequence	
	Protein Accession #: NP_002407	
40	1 11 21 31 41 51	
	MKKSGLVFLI GIILLVLIGV QGTPVVRKGR CSCISTNQGT IHLQSLKDLK QFAPSPSCEK	60
	IEIIATLQNG VQTCLNPDSA DVKELIKWE KQVSQKKQK NGKHQKKKV LKVRKSQSR	120
	QKKT	
	Seq ID NO: 366 Protein Sequence	
45	Protein Accession #: NP_006524.1	
	1 11 21 31 41 51	
	MARSLVCLGV IILLSAFSGP GVRGGMPKL ADRKLCADQE CSHPISTMAVA LQDYNAPDCR	60
	FLTIHRGQVV YVFSKLKGRG RLPWGGSVQG DYYGDLAARL GYFPSSIVRE DQTLKPGKVD	120
	VKTOKWDFYC Q	131

It is understood that the examples described above in no way serve to limit the true  
 65 scope of this invention, but rather are presented for illustrative purposes. All publications,  
 sequences of accession numbers, and patent applications cited in this specification are herein  
 incorporated by reference as if each individual publication or patent application were  
 specifically and individually indicated to be incorporated by reference.

WHAT IS CLAIMED IS:

- 1           1.       A method for determining the presence or absence of a pathological cell in a  
2       patient, said method comprising detecting a nucleic acid comprising a sequence at least 80%  
3       identical to a sequence as described in Tables 2A-68 in a biological sample from said patient,  
4       thereby determining the presence or absence of said pathological cell.
- 1           2.       The method of Claim 1, wherein:  
2           a) said pathology is described in Table 1, including a cancer; and/or  
3           b) said biological sample comprises isolated nucleic acids.
- 1           3.       The method of Claim 1, wherein said biological sample is tissue from an organ  
2       which is affected by said pathology of Table 1, including a cancer.
- 1           4.       The method of Claim 2, wherein said nucleic acids are mRNA
- 1           5.       The method of Claim 2:  
2           a) further comprising a step of amplifying nucleic acids before said step of detecting  
3           said nucleic acid; or  
4           b) where said detecting is of a protein encoded by said nucleic acid.
- 1           6.       The method of Claim 1, wherein said nucleic acid comprises a sequence as  
2       described in Tables 2A-68.
- 1           7.       The method of Claim 2, wherein:  
2           a) said detecting step is carried out by:  
3           i) using a labeled nucleic acid probe;  
4           ii) utilizing a biochip comprising a sequence at least 80% identical to a sequence  
5           as described in Tables 2A-68; or  
6           iii) detecting a polypeptide encoded by said nucleic acid; or  
7           b) said patient is:  
8           i) undergoing a therapeutic regimen to treat said pathology of Table 1; or  
9           ii) is suspected of having said pathology or cancer.
- 1           8.       An isolated nucleic acid molecule comprising a sequence as described in  
2       Tables 2A-68.

- 1           9.     The nucleic acid molecule of Claim 8, which is labeled.
- 1           10.    An expression vector comprising the nucleic acid of Claim 8.
- 1           11.    A host cell comprising the expression vector of Claim 10.
- 1           12.    An isolated polypeptide which is encoded by a nucleic acid molecule  
2 comprising a sequence as described in Tables 2A-68.
- 1           13.    An antibody that specifically binds a polypeptide of Claim 12.
- 1           14.    The antibody of Claim 13:
- 2           a) conjugated to an effector component;
- 3           b) conjugated to a detectable label, including a fluorescent label, a radioisotope, or a  
4           cytotoxic chemical;
- 5           c) which is an antibody fragment; or
- 6           d) which is a humanized antibody.
- 1           15.    A method for specifically targeting a compound to a pathological cell in a  
2 patient, said method comprising administering to said patient an antibody of Claim 13,  
3 thereby providing said targeting.
- 1           16.    A method for determining the presence or absence of a pathological cell in a  
2 patient, said method comprising contacting a biological sample with an antibody of Claim 13.
- 1           17.    The method of Claim 16, wherein:
- 2           a) said antibody is conjugated to:
- 3           i) an effector component; or
- 4           ii) a fluorescent label; or
- 5           b) said biological sample is a blood, serum, urine, or stool sample.
- 1           18.    A method for identifying a compound that modulates a pathology-associated  
2 polypeptide, said method comprising the steps of:

- 3 a) contacting said compound with a pathology-associated polypeptide, said  
4 polypeptide encoded by a polynucleotide that selectively hybridizes to a sequence  
5 at least 80% identical to a sequence as described in Tables 2A-68; and  
6 b) determining the functional effect of said compound upon said polypeptide.

1 19. A drug screening assay comprising the steps of:

- 2 a) administering a test compound to a mammal having a pathology of Table 1 or a  
3 cell isolated therefrom; and  
4 b) comparing the level of gene expression of a polynucleotide that selectively  
5 hybridizes to a sequence at least 80% identical to a sequence as described in  
6 Tables 2A-68 in a treated cell or mammal with the level of gene expression of said  
7 polynucleotide in a control cell or mammal, wherein a test compound that  
8 modulates said level of expression of the polynucleotide is a candidate for the  
9 treatment of said pathology.

10

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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
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- Declaration under Rule 4.17:**  
— of inventorship (Rule 4.17(iv)) for US only
- Published:**  
— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:  
8 May 2003
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



**WO 03/025138 A3**

(54) Title: METHODS OF DIAGNOSIS OF CANCER COMPOSITIONS AND METHODS OF SCREENING FOR MODULATORS OF CANCER

(57) Abstract: Described herein are genes whose expression are up-regulated or down-regulated in specific cancers. Related methods and compositions that can be used for diagnosis and treatment of those cancers are disclosed. Also described herein are methods that can be used to identify modulators of selected cancers.



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/29560

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68

US CL : 435/6

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6, 7.1, 287.2; 436/63, 64

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P — Y,P	US 6,426,186 B1 (JONES et al.) 30 July 2002 (30.07.2002), see especially Detailed Description of the Invention and Sequence 62.	1-6 — 7
X — Y	US 6,194,158 B1 (KROES et al.) 27 February 2001 (27.02.2001), see especially Background of the Invention and Detailed Description of the Invention.	2-5 — 1, 6, 7
X,P — Y,P	US 6,440,676 B1 (KROES et al.) 27 August 2002 (27.08.2002), see especially Background of the Invention and Detailed Description of the Invention.	2-5 — 1, 6, 7
Y,P	US 6,500,938 B1 (AU-YOUNG et al.) 31 December 2002 (31.12.2002), see especially Summary of the Invention and Description of the Invention.	1-7
Y	SMYTH TEMPLETON et al. Cloning and Characterization of Human Tumor Cell Interstitial Collagenase. September 1990, Volume 50, Number 17, pages 5431-5437, especially Figure 2.	1-7

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"B" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;"

document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

03 March 2003 (03.03.2003)

24 MAR 2003

Name and mailing address of the ISA/US

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/29560

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claim Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
Please See Continuation Sheet x

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-7 for Specie A(hemangiomas) and B (SEQ ID NO: 1)

Remark on Protest

☐  
☐

The additional search fees were accompanied by the applicant's protest.  
No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/29560

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional examination fees must be paid.

Groups 1-104,648, claim(s) 1-7, drawn to a method for determining the presence or absence of a pathological (Specie A) cell in a patient via detection of polynucleotides that are at least 80% identical to listed sequences (Specie B). If electing from this Group Set, Applicants are asked to elect one species from A and B. Species A has 254 possibilities (see Table 1). Please note that the sequences in Tables 2A-68 are unsearchable as they are not included in the Sequence Listing. Applicants have supplied 412 nucleic acid sequences from which a selection can be made for Specie B. The total number of individual inventions in this Group Set including all possible combinations of Species A and B is 104,648.

Groups 104,649-105,060, claim(s) 8-12, drawn to an isolated nucleic acid molecules from Tables 2A-68, expression vectors, host cells, and polypeptides encoded by nucleic acid molecules with listed sequences from Tables 2A-68 (Species B). If electing from this Group Set, Applicants are asked to elect one species from Species B. Please note that the sequences in Tables 2A-68 are unsearchable as they are not included in the Sequence Listing. Applicants have supplied 412 nucleic acid sequences from which a selection can be made for Specie B. The total number of individual inventions possible in this Group Set with Specie B is 412.

Groups 105,061-105,472, claim(s) 13-14, drawn to an antibody that binds to a polypeptide encoded by a polynucleotide with sequences from Tables 2A-68 (Species B). If electing from this Group Set, Applicants are asked to elect one species from Species B. Please note that the sequences in Tables 2A-68 are unsearchable as they are not included in the Sequence Listing. Applicants have supplied 412 nucleic acid sequences from which a selection can be made for Specie B. The total number of individual inventions possible in this Group Set with Specie B is 412.

Groups 105,473-105,884, claim(s) 15, drawn to a method for targeting a compound to a pathological cell in a patient via administering an antibody that binds to a polypeptide encoded by a polynucleotide from Tables 2A-68 (Species B). If electing from this Group Set, Applicants are asked to elect one species from Species B. Please note that the sequences in Tables 2A-68 are unsearchable as they are not included in the Sequence Listing. Applicants have supplied 412 nucleic acid sequences from which a selection can be made for Specie B. The total number of individual inventions possible in this Group Set with Specie B is 412.

Groups 105,885-106,296, claim(s) 16-17, drawn to a method for determining the presence or absence of a pathological cell in a patient via contacting the sample with an antibody that binds to a polypeptide encoded by a polynucleotide from Tables 2A-68 (Species B). If electing from this Group Set, Applicants are asked to elect one species from Species B. Please note that the sequences in Tables 2A-68 are unsearchable as they are not included in the Sequence Listing. Applicants have supplied 412 nucleic acid sequences from which a selection can be made for Specie B. The total number of individual inventions possible in this Group Set with Specie B is 412.

Groups 106,297-106,708, claim(s) 18, drawn to a method for identifying a compound that modulates a pathology-associated polypeptide encoded by a polynucleotide that hybridizes to a sequence in Tables 2A-68 (Species B). If electing from this Group Set, Applicants are asked to elect one species from Species B. Please note that the sequences in Tables 2A-68 are unsearchable as they are not included in the Sequence Listing. Applicants have supplied 412 nucleic acid sequences from which a selection can be made for Specie B. The total number of individual inventions possible in this Group Set with Specie B is 412.

Groups 106,709-211,356, claim(s) 19, drawn to drug screening assay by administering a compound to a mammal or cell having a pathology (of Table 1) and comparing the level of gene expression of a polynucleotide that hybridizes to a sequence that is 80% identical to sequences as described in Tables 2A-68 (Species B) to gene expression in control cells or mammals. If electing from this Group Set, Applicants are asked to elect one species from A and B. Species A has 254 possibilities (see Table 1). Please note that the sequences in Tables 2A-68 are unsearchable as they are not included in the Sequence Listing. Applicants have supplied 412 nucleic acid sequences from which a selection can be made for Specie B. The total number of individual inventions in this Group Set including all possible combinations of Species A and B is 104,648.

This International Searching Authority considers that the international application does not comply with the requirements of unity of invention (Rules 13.1, 13.2, and 13.3) for the reasons indicated below:

The inventions listed as all Group Sets (Groups 1-211,356) do not relate to a single general inventive concept under PCT Rule 13.1, because under PCT Rule 13.2 they lack the same or corresponding special technical features for the following reasons:

Groups 1-104,648 and Groups 105,472-211,356 are directed to methods or assays which vary in one or more of the following: reactants, steps, and/or goals which are not coextensive and which do not share the same technical feature. Groups 104,649-105,472 have two separate special technical features, a nucleic acid and an antibody, respectively. These are directed to different chemical entity types regarding the critical limitations featuring different structures and functions. The antibodies undergo recognition and binding reactions



## INTERNATIONAL SEARCH REPORT

International application No.

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wherein what is bound is different from what is bound by the compositions including the nucleic acids. Thus, in summary, each Group is directed to a different special technical feature and thus supports this lack of unity.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In order for more than one species to be examined, the appropriate additional examination fees must be paid. The species are as follows:

The claims in the Groups 1-104,648 and 106,709-211,356 include a series of species A directed to different pathologies which are listed in Table 1. Each of these types of pathologies are separate entities which affect patients differently, meaning each has its own special technical feature.

The claims in all Groups (1-211,356) include a series of species B directed to nucleic acid sequence listed (412 possibilities) which are considered separate as each defines its own special technical feature.

The first listed pathology (Specie A) and SEQ ID NO: 1 (Species B) will be automatically searched. For each additional Group with a specie combination elected, the fee is an additional \$210.00.

### Continuation of B. FIELDS SEARCHED Item 3:

WEST, PUBMED, BIOSIS, CAPLUS, MEDLINE, SCISEARCH, EMBASE searching terms: diagnosis, cancer, screen, modulator, pathological cell, patient, nucleic acid, tissue, mRNA, detect, probe, blochip, array, therapeutic

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